

=> fil reg

FILE 'REGISTRY' ENTERED AT 09:08:34 ON 29 SEP 2005

=> d his ful

FILE 'HCAPLUS' ENTERED AT 08:09:04 ON 29 SEP 2005

L1 1 SEA ABB=ON PLU=ON US20050014924/PN
SEL RN

FILE 'REGISTRY' ENTERED AT 08:09:29 ON 29 SEP 2005

L2 6 SEA ABB=ON PLU=ON (50-00-0/BI OR 5063-96-7/BI OR
541-59-3/BI OR 7647-01-0/BI OR 852999-17-8/BI OR
853057-87-1/BI)

FILE 'LREGISTRY' ENTERED AT 08:09:48 ON 29 SEP 2005

L3 STR
L4 STR
L5 STR

FILE 'REGISTRY' ENTERED AT 08:11:33 ON 29 SEP 2005

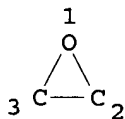
L6 28 SEA SSS SAM L3 AND (L4 OR L5)
D SCAN
L7 STR L3
L8 14 SEA SSS SAM L7 AND (L4 OR L5)
D SCAN
L9 249 SEA SSS FUL L7 AND (L4 OR L5)
L10 1 SEA ABB=ON PLU=ON L9 AND L2
SAV L9 BOY742/A

FILE 'HCAPLUS' ENTERED AT 08:38:08 ON 29 SEP 2005

L11 158 SEA ABB=ON PLU=ON L9
L12 94 SEA ABB=ON PLU=ON L11(L) PREP/RL
L13 3 SEA ABB=ON PLU=ON L12 AND POLYMER?/SC, SX
L14 2 SEA ABB=ON PLU=ON L12 AND PARTICLE?
L15 4 SEA ABB=ON PLU=ON L13 OR L14
L16 1 SEA ABB=ON PLU=ON L15 AND L1
D L1 ALL
L17 8 SEA ABB=ON PLU=ON L11 AND CROSSLINK?
D HITSTR
D HITSTR 2-3
L18 10 SEA ABB=ON PLU=ON L15 OR L16 OR L17
D L11 HITSTR
D L11 HITSTR 2-3
L19 17 SEA ABB=ON PLU=ON L12 AND POLYMER?
L20 12 SEA ABB=ON PLU=ON L19 NOT L18
L21 3 SEA ABB=ON PLU=ON L11 AND (PARTICL? OR PARTICULAT?
OR GRANUL? OR GRAIN?)
L22 11 SEA ABB=ON PLU=ON L18 OR L21
L23 12 SEA ABB=ON PLU=ON L20 NOT L22

=> d que l22

L1 1 SEA FILE=HCAPLUS ABB=ON PLU=ON US20050014924/PN
L4 STR



NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RSPEC I

NUMBER OF NODES IS 3

STEREO ATTRIBUTES: NONE

L5 STR

CH2-CH2-O

1 2 3

NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

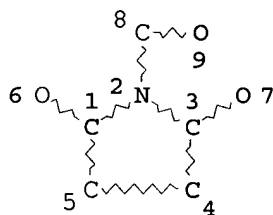
GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 3

STEREO ATTRIBUTES: NONE

L7 STR



NODE ATTRIBUTES:

CONNECT IS E2 RC AT 8

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 9

STEREO ATTRIBUTES: NONE

L9 249 SEA FILE=REGISTRY SSS FUL L7 AND (L4 OR L5)
 L11 158 SEA FILE=HCAPLUS ABB=ON PLU=ON L9
 L12 94 SEA FILE=HCAPLUS ABB=ON PLU=ON L11 (L) PREP/RL
 L13 3 SEA FILE=HCAPLUS ABB=ON PLU=ON L12 AND POLYMER?/SC, SX

 L14 2 SEA FILE=HCAPLUS ABB=ON PLU=ON L12 AND PARTICLE?
 L15 4 SEA FILE=HCAPLUS ABB=ON PLU=ON L13 OR L14
 L16 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L15 AND L1
 L17 8 SEA FILE=HCAPLUS ABB=ON PLU=ON L11 AND CROSSLINK?
 L18 10 SEA FILE=HCAPLUS ABB=ON PLU=ON L15 OR L16 OR L17
 L21 3 SEA FILE=HCAPLUS ABB=ON PLU=ON L11 AND (PARTICL? OR
 PARTICULAT? OR GRANUL? OR GRAIN?)
 L22 11 SEA FILE=HCAPLUS ABB=ON PLU=ON L18 OR L21

=> fil hcap
 FILE 'HCAPLUS' ENTERED AT 09:09:12 ON 29 SEP 2005
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 PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
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FILE COVERS 1907 - 29 Sep 2005 VOL 143 ISS 14
 FILE LAST UPDATED: 28 Sep 2005 (20050928/ED)

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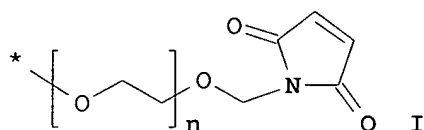
This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d l22 1-11 ibib abs hitstr hitind

L22 ANSWER 1 OF 11 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2005:60006 HCAPLUS
 DOCUMENT NUMBER: 142:135564
 TITLE: Maleimide group-containing polymer
particles and their preparation
 INVENTOR(S): Inaba, Yoshihiro; Urano, Chisato; Kobayashi,
 Takako
 PATENT ASSIGNEE(S): Fuji Xerox Co., Ltd., Japan
 SOURCE: U.S. Pat. Appl. Publ., 8 pp.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	
US 2005014924	A1	20050120	US 2004-780742	2004 0219
JP 2005029683	A2	20050203	JP 2003-196340	2003 0714
PRIORITY APPLN. INFO.:			JP 2003-196340	A 2003 0714

GI

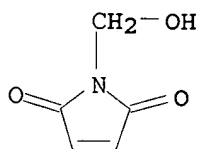


- AB The maleimide group-containing **crosslinked** polymer **particle** containing a group I ($n \geq 1$) is prepared by reacting hydroxymethylmaleimide with a hydroxyl group-containing polymer **particle** obtained by introducing a polyethylene glycol into a **crosslinked** polymer **particle**. The polymer **particles** are useful as carriers for diagnostic medicines or medicaments, chromatog. carriers, viscosity regulators, resin molding materials, paint additives, **crosslinking** agents and cosmetic additives. Thus, 10 parts tert-Bu methacrylate-divinylbenzene **crosslinked** polymer **particles** are mixed with polyethylene glycol 50, mesitylene 15, and tetra-n-propoxytitanium 0.2 parts, reacted to form **particles**, 10 parts of which was mixed with 17 parts hydroxymethylmaleimide derived from maleimide and formaldehyde, 500 parts toluene and 0.4 parts p-toluenesulfonic acid monohydrate and heated to give maleimide group-containing polymer **particles** having maleimide content 1.2 mmol/g.
- IT 852999-17-8DP, tert-Butyl methacrylate-divinylbenzene copolymer, reaction products with polyoxyethylene and hydroxymethylmaleimide
(**particles**; preparation of maleimide group-containing polymer **particles**)
- RN 852999-17-8 HCAPLUS
- CN 2-Propenoic acid, 2-methyl-, 1,1-dimethylethyl ester, polymer with diethenylbenzene and oxirane, (2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)methyl ether, graft (9CI) (CA INDEX NAME)

CM 1

CRN 5063-96-7

CMF C5 H5 N O3



CM 2

CRN 853057-87-1

CMF (C10 H10 . C8 H14 O2 . C2 H4 O)x

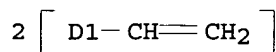
CCI PMS

CM 3

CRN 1321-74-0

CMF C10 H10

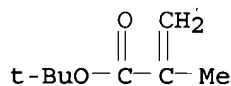
CCI IDS



CM 4

CRN 585-07-9

CMF C8 H14 O2



CM 5

CRN 75-21-8

CMF C2 H4 O



IC ICM C08L051-00

INCL 528310000

CC 37-3 (Plastics Manufacture and Processing)
Section cross-reference(s): 38, 42, 62, 63ST maleimide contg polymer **particle** prepn;
hydroxymethylmaleimide polyethylene glycol **crosslinked**
polymer reactionIT Polyoxyalkylenes, preparation
(graft; preparation of maleimide group-containing polymer
particles)IT **Particles**
(preparation of maleimide group-containing polymer **particles**)IT 5063-96-7P 853057-87-1P
(intermediate; preparation of maleimide group-containing polymer
particles)IT 852999-17-8DP, tert-Butyl methacrylate-divinylbenzene
copolymer, reaction products with polyoxyethylene and
hydroxymethylmaleimide
(**particles**; preparation of maleimide group-containing polymer
particles)IT 7647-01-0DP, Hydrochloric acid, reaction products with
crosslinked methacrylate polymers, polyoxyalkylene and
hydroxymethylmaleimide

(preparation of maleimide group-containing polymer particles)
 IT 50-00-0, Formaldehyde, reactions 541-59-3, Maleimide
 (preparation of maleimide group-containing polymer particles)

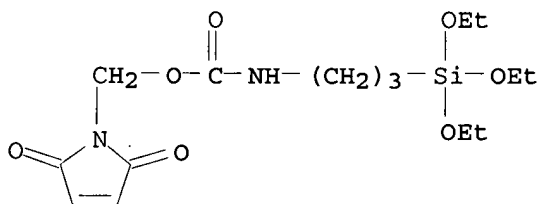
L22 ANSWER 2 OF 11 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2004:1012329 HCAPLUS
 DOCUMENT NUMBER: 142:156440
 TITLE: Synthesis of Organic-Inorganic Polymer Hybrids
 Controlled by Diels-Alder Reaction
 AUTHOR(S): Adachi, Kaoru; Achimuthu, Ashok Kumar; Chujo,
 Yoshiki
 CORPORATE SOURCE: Department of Polymer Chemistry, Graduate
 School of Engineering, Kyoto University,
 Nishikyo, Kyoto, 615-8510, Japan
 SOURCE: Macromolecules (2004), 37(26), 9793-9797
 CODEN: MAMOBX; ISSN: 0024-9297
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB The homogeneity of the polymer hybrid was controlled by
 Diels-Alder reaction. The polymer hybrids were prepared from
 styrene copolymer bearing pendent furan moieties (20%) and
 tetraethoxysilane using maleimide silane coupling agent by a
 sol-gel process. Styrene copolymer was synthesized by free
 radical copolymerization of styrene with 4-furfuryloxymethylstyrene. IR
 spectroscopic data of the hybrid materials support the occurrence
 of Diels-Alder reaction between the pendent furan moieties of the
 styrene copolymer and the maleimide silane coupling agent. The
 thermal and morphol. properties of the hybrid materials were
 investigated by DSC, TGA, and SEM. The retro-Diels-Alder reaction
 was observed in the DSC thermogram. The polymer hybrids showed
 higher solvent resistance property at the b.p. of THF, but because
 of the retro-Diels-Alder reaction, the organic polymer in the polymer
 hybrid obtained was extracted with DMF at 130 °C.

IT 828258-41-9P
 (coupling agent; synthesis of organic-inorg. polymer hybrids
 controlled by Diels-Alder reaction)

RN 828258-41-9 HCAPLUS

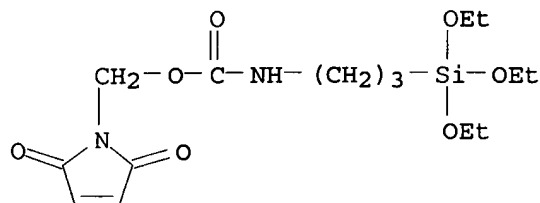
CN Carbamic acid, [3-(triethoxysilyl)propyl]-, (2,5-dihydro-2,5-dioxo-
 1H-pyrrol-1-yl)methyl ester (9CI) (CA INDEX NAME)



IT 828258-41-9DP, Diels-Alder reaction products with styrene
 copolymer, then sol-gel polymerization with TEOS
 (synthesis of organic-inorg. polymer hybrids controlled by
 Diels-Alder reaction)

RN 828258-41-9 HCAPLUS

CN Carbamic acid, [3-(triethoxysilyl)propyl]-, (2,5-dihydro-2,5-dioxo-
 1H-pyrrol-1-yl)methyl ester (9CI) (CA INDEX NAME)



CC 35-8 (Chemistry of Synthetic High Polymers)

IT Particle size

Phase separation

(without maleimide silane coupling agent; synthesis of organic-inorg. polymer hybrids controlled by Diels-Alder reaction)

IT 828258-41-9P

(coupling agent; synthesis of organic-inorg. polymer hybrids controlled by Diels-Alder reaction)

IT 78-10-4DP, TEOS, sol-gel polymerization with maleimide silane modified styrene copolymer 200349-75-3DP, 4-Furfuryloxymethylstyrene-styrene copolymer, Diels-Alder reaction products with maleimide silane coupling agent, sol-gel polymerization with TEOS; or Diels-Alder reaction products with model compound 828258-41-9DP, Diels-Alder reaction products with styrene copolymer, then sol-gel polymerization with TEOS

(synthesis of organic-inorg. polymer hybrids controlled by Diels-Alder reaction)

REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 3 OF 11 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:193618 HCAPLUS

DOCUMENT NUMBER: 140:351546

TITLE: Evaluation of MafG interaction with Maf recognition element arrays by surface plasmon resonance imaging technique

AUTHOR(S): Kyo, Motoki; Yamamoto, Tae; Motohashi, Hozumi; Kamiya, Terue; Kuroita, Toshihiro; Tanaka, Toshiyuki; Engel, James Douglas; Kawakami, Bunsei; Yamamoto, Masayuki

CORPORATE SOURCE: TOYOBO Co. Ltd. Bio 21 Project, Fukui, 914-0047, Japan

SOURCE: Genes to Cells (2004), 9(2), 153-164
CODEN: GECEFL; ISSN: 1356-9597

PUBLISHER: Blackwell Publishing Ltd.

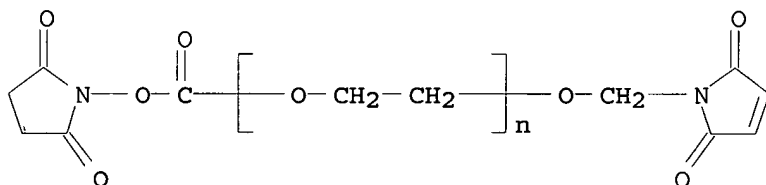
DOCUMENT TYPE: Journal

LANGUAGE: English

AB Specific interactions between transcription factors and cis-acting DNA sequence motifs are primary events for the transcriptional regulation. Many regulatory elements appear to diverge from the most optimal recognition sequences. To evaluate affinities of a transcription factor to various suboptimal sequences, we have developed a new detection method based on the surface plasmon resonance (SPR) imaging technique. Transcription factor MafG and its recognition sequence MARE (Maf recognition elements) were adopted to evaluate the new method. We modified DNA immobilization procedure on to the gold chip, so that a double-stranded DNA array was successfully fabricated. We further found that a hydrophilic flexible spacer composed of the poly (ethylene glycol) moiety between DNA and alkanethiol

self-assembled monolayers on the surface is effective for preventing nonspecific adsorption and facilitating specific binding of MafG. Multiple interaction profiles between MafG and six of MARE-related sequences were observed by the SPR imaging technique. The kinetic values obtained by SPR imaging showed very good correlation with those obtained from electrophoretic gel mobility shift assays, although absolute values were deviated from each other. These results demonstrate that the double-stranded DNA array fabricated with the modified multistep procedure can be applied for the comprehensive anal. of the transcription factor-DNA interaction.

IT 680592-24-9
(**crosslinker**; evaluation of MafG interaction with Maf recognition element arrays by surface plasmon resonance imaging technique)
RN 680592-24-9 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α -[[[(2,5-dioxo-1-pyrrolidinyloxy)carbonyl]- ω -[(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)methoxy]- (9CI) (CA INDEX NAME)



CC 3-4 (Biochemical Genetics)
ST transcription factor MafG MARE binding surface plasmon resonance imaging; double stranded DNA microarray PEG contg **crosslinker**
IT Immobilization, molecular or cellular
(of dsDNA on gold surface, **crosslinkers** for; evaluation of MafG interaction with Maf recognition element arrays by surface plasmon resonance imaging technique)
IT 103708-09-4 680592-24-9
(**crosslinker**; evaluation of MafG interaction with Maf recognition element arrays by surface plasmon resonance imaging technique)
REFERENCE COUNT: 47 THERE ARE 47 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 4 OF 11 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1998:576877 HCAPLUS
DOCUMENT NUMBER: 129:245626
TITLE: New imide copolymers with coronand structure
AUTHOR(S): Kottner, Nils; Klemm, Elisabeth
CORPORATE SOURCE: Institut Organische Chemie Makromolekulare Chemie, Friedrich-Schiller-Universitaet, Jena, D-07743, Germany
SOURCE: Polymer Bulletin (Berlin) (1998), 41(2), 153-160
CODEN: POBUDR; ISSN: 0170-0839
PUBLISHER: Springer-Verlag
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The Diels-Alder reaction of bis(2-pyrone) with various aliphatic and aromatic bismaleimides in dilute solution was carried out to produce linear soluble copolymers with a coronand structure. The structure was confirmed by NMR spectra and model reactions. The polymers show weight losses .simeq.440° determined by thermogravimetric anal.

IT 213260-56-1P
(model compound; preparation by Diels-Alder reaction and structure of coronand polymers from bispyrone and bismaleimides)

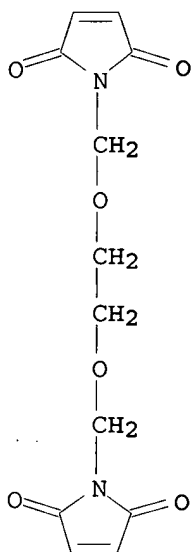
RN 213260-56-1 HCAPLUS

CN 1H-Pyrrole-2,5-dione, 1,1'-[1,2-ethanediylbis(oxymethylene)]bis-, polymer with 4,6-dimethyl-2H-pyran-2-one (9CI) (CA INDEX NAME)

CM 1

CRN 213260-39-0

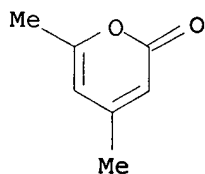
CMF C12 H12 N2 O6



CM 2

CRN 675-09-2

CMF C7 H8 O2



IT 213260-40-3P 213260-46-9P
(preparation by Diels-Alder reaction and structure of coronand polymers from bispyrone and bismaleimides)

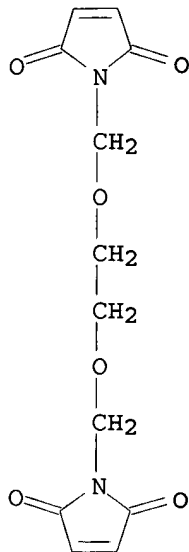
RN 213260-40-3 HCAPLUS

CN 1H-Pyrrole-2,5-dione, 1,1'-[1,2-ethanediylbis(oxymethylene)]bis-,
polymer with 1,1'-(methylenedi-4,1-phenylene)bis[1H-pyrrole-2,5-
dione] and 6,6'-(1,8-octanediyl)bis[4-methyl-2H-pyran-2-one] (9CI)
(CA INDEX NAME)

CM 1

CRN 213260-39-0

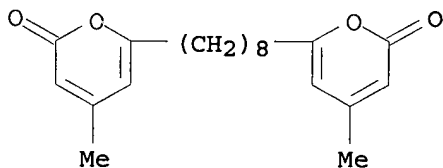
CMF C12 H12 N2 O6



CM 2

CRN 14983-15-4

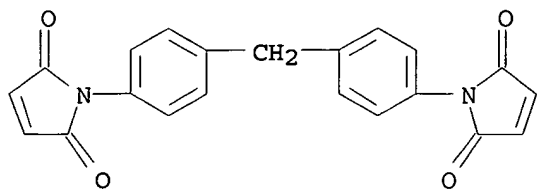
CMF C20 H26 O4



CM 3

CRN 13676-54-5

CMF C21 H14 N2 O4



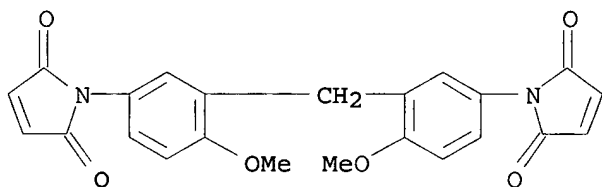
RN 213260-46-9 HCAPLUS

CN 1H-Pyrrole-2,5-dione, 1,1'-[1,2-ethanediylbis(oxyethylene)]bis-, polymer with 1,1'-[methylenebis(4-methoxy-3,1-phenylene)]bis[1H-pyrrole-2,5-dione] and 6,6'-(1,8-octanediyl)bis[4-methyl-2H-pyran-2-one] (9CI) (CA INDEX NAME)

CM 1

CRN 213260-45-8

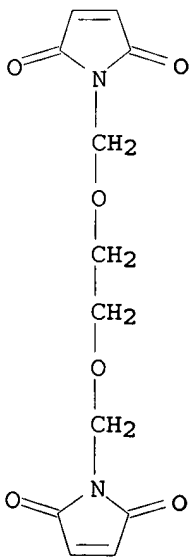
CMF C23 H18 N2 O6



CM 2

CRN 213260-39-0

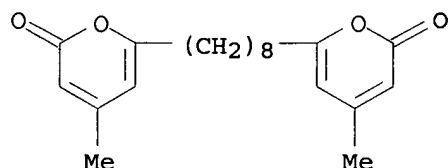
CMF C12 H12 N2 O6



CM 3

CRN 14983-15-4

CMF C20 H26 O4



CC 35-7 (Chemistry of Synthetic High Polymers)

IT 213260-50-5P 213260-52-7P 213260-53-8P 213260-54-9P

213260-55-0P **213260-56-1P** 213260-58-3P

(model compound; preparation by Diels-Alder reaction and structure of coronand polymers from bispyrone and bismaleimides)

IT **213260-40-3P** 213260-41-4P 213260-43-6P 213260-44-7P**213260-46-9P** 213260-47-0P

(preparation by Diels-Alder reaction and structure of coronand polymers from bispyrone and bismaleimides)

L22 ANSWER 5 OF 11 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1995:860412 HCAPLUS

DOCUMENT NUMBER: 123:258647

TITLE: Polymerization of epoxy oligomer acrylate in the presence of maleimides

AUTHOR(S): Kalinina, N. A.; Migunova, I. I.; Ivanov, V. S.

CORPORATE SOURCE: Russia

SOURCE: Vestnik Sankt-Peterburgskogo Universiteta, Seriya 4: Fizika, Khimiya (1994), (4), 53-61
CODEN: VSUKEH

PUBLISHER: Izdatelstvo Sankt-Peterburgskogo Universiteta

DOCUMENT TYPE: Journal

LANGUAGE: Russian

AB Heat-induced polymerization of epoxy oligomer acrylate is accelerated by addition of maleimides. At first, soluble products of copolymn. are formed, which **crosslink** later. Depending on maleimide structure and oligomer-maleimide ratio, polymeric products with a wide range of thermomech. properties can be produced.IT **169275-08-5P**(thermal polymerization and **crosslinking** of epoxy oligomer acrylate with maleimides)

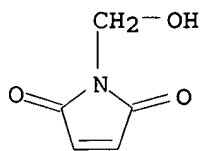
RN 169275-08-5 HCAPLUS

CN 1H-Pyrrole-2,5-dione, 1-(hydroxymethyl)-, polymer with (chloromethyl)oxirane polymer with 4,4'-(1-methylethylidene)bis[phenol] 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 5063-96-7

CMF C5 H5 N O3



CM 2

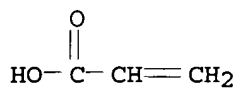
CRN 55818-57-0

CMF (C15 H16 O2 . C3 H5 Cl O)x . x C3 H4 O2

CM 3

CRN 79-10-7

CMF C3 H4 O2



CM 4

CRN 25068-38-6

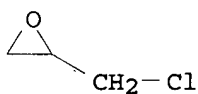
CMF (C15 H16 O2 . C3 H5 Cl O)x

CCI PMS

CM 5

CRN 106-89-8

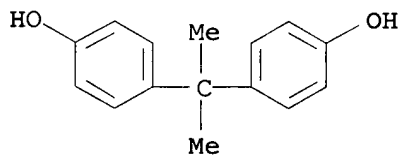
CMF C3 H5 Cl O



CM 6

CRN 80-05-7

CMF C15 H16 O2



CC 37-6 (Plastics Manufacture and Processing)
 ST thermal polymn **crosslinking** epoxy acrylate maleimide
 IT Elasticity

Polymerization
 (thermal polymerization and **crosslinking** of epoxy oligomer
 acrylate with maleimides)

IT Stress, mechanical
 (-strain, thermal polymerization and **crosslinking** of epoxy
 oligomer acrylate with maleimides)

IT Epoxy resins, properties
 (acrylates, polymers, thermal polymerization and **crosslinking**
 of epoxy oligomer acrylate with maleimides)

IT Heat of polymer degradation
 Polymer degradation
 (oxidative, thermal, thermal polymerization and **crosslinking**
 of epoxy oligomer acrylate with maleimides)

IT 156377-96-7P 169275-07-4P **169275-08-5P** 169275-09-6P
 169275-10-9P 169275-11-0P
 (thermal polymerization and **crosslinking** of epoxy oligomer
 acrylate with maleimides)

L22 ANSWER 6 OF 11 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1992:501120 HCAPLUS

DOCUMENT NUMBER: 117:101120

TITLE: Preparation of fulgimide and chromene
 derivatives and photochromic moldings
 containing them

INVENTOR(S): Imura, Tomohito; Momota, Junji; Tanaka,
 Takashi

PATENT ASSIGNEE(S): Tokuyama Soda Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 23 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

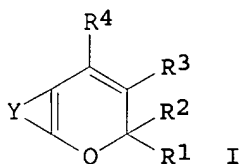
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 03252492	A2	19911111	JP 1990-47240	1990 0301
JP 2735668	B2	19980402		
PRIORITY APPLN. INFO.:			JP 1990-47240	1990 0301

GI



AB A photochromic molding comprises resin **particles** (average
particle size 0.01-100 μm) containing a fulgimide and
 chromene derivative (I; R1, R2 = alkyl; or CR1R2 = norbornylidene,

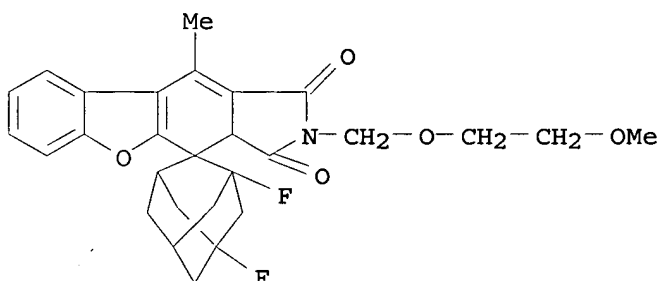
bicyclo[3.3.1]non-9-ylidene; R3, R4 = H, alkyl, aryl, aralkyl, substituted NH2; ring completed by Y = (un)substituted aromatic hydrocarbon or unsatd. heterocyclic ring; when R1, R2 = alkyl, ring completed by Y = bicyclic aromatic hydrocarbon or bicyclic unsatd. heterocyclic ring, each substituted by at least one C6-20 alkyl, C6-20 alkoxy, ZSR5, ZXR5R6; Z = alkylene, (OZ1)n; n = pos. integer; Z1 = alkylene; X = N, P, PO2, OPO2) dispersed in a thermosetting resin. The photochromic molding, e.g. a film or lens, shows excellent durability of photochromic property.

IT 123833-85-2

(photochromic substance, resin microparticle containing, for photochromic molding)

RN 123833-85-2 HCAPLUS

CN Spiro[4H-benzofuro[2,3-f]isoindole-4,2'-tricyclo[3.3.1.1^{3,7}]decane]-1,3(2H,3aH)-dione, 1',5'-difluoro-2-[(2-methoxyethoxy)methyl]-10-methyl- (9CI) (CA INDEX NAME)



IC ICM C09K009-02

ICS C07D311-92; C07D311-96; C07F009-655; C08L101-00

ICA C07D405-04; C07D409-06; C07D413-04; C07D487-04; C07D491-048; C07D495-10

CC 74-9 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 27, 36, 37

IT Photochromic substances

(fulgimide and chromene derivs., resin particles containing, for photochromic moldings)

IT 123803-89-4 123803-90-7 123803-91-8 123803-94-1
123803-96-3 123804-00-2 123804-02-4 123804-05-7
123804-09-1 123833-83-0 123833-85-2 123833-87-4
134167-47-8 136189-54-3 136189-55-4 139083-65-1
139083-66-2 139083-69-5 139083-70-8 139083-75-3
142288-50-4 142288-51-5 142288-52-6 142288-53-7
142288-54-8 142855-91-2

(photochromic substance, resin microparticle containing, for photochromic molding)

L22 ANSWER 7 OF 11 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1979:421876 HCAPLUS

DOCUMENT NUMBER: 91:21876

TITLE: Thermosetting resin compositions

INVENTOR(S): Nishikawa, Akio; Segawa, Masanori; Yokono, Tadashi

PATENT ASSIGNEE(S): Hitachi, Ltd., Japan; Hitachi Chemical Co., Ltd.

SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.

DOCUMENT TYPE: CODEN: JKXXAF
 LANGUAGE: Patent
 FAMILY ACC. NUM. COUNT: 1 Japanese
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 54004995	A2	19790116	JP 1977-69850	1977 0615
JP 59041455	B4	19841006	JP 1977-69850	A 1977 0615

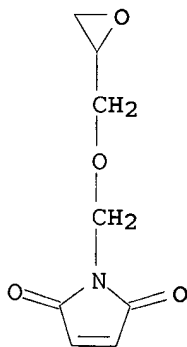
PRIORITY APPLN. INFO.: JP 1977-69850

AB Soluble and readily-curable thermosetting resin compns. consist of N-(glycidyoxy)maleimide (I) [69861-04-7] or N-(glycidyloxymethyl)maleimide (II) [69861-06-9], a phenol-aldehyde condensate, and an epoxy resin. Thus, I, EP 828 (epoxy equivalent 175-210), a novolak phenol-HCHO condensate, stearic acid, and epoxy silane KBM 403 in 100, 50, 5, 2, and 1 (or 100, 100, 10, 2, and 1; or 100, 200, 15, 2, and 1) weight ratio were roll-blended with 70 weight % powdered quartz at 60-70° to yield a molding composition curable at 180° within 3 min. In another example, a blended composition of II, DEN 431 (epoxy equivalent 172-79), and a novolak o-cresol-HCHO condensate was soluble (>40%) in polar and ketonic solvents.

IT 69861-06-9
 (molding compns., containing phenolic and epoxy resins, rapid-curing)

RN 69861-06-9 HCAPLUS

CN 1H-Pyrrole-2,5-dione, 1-[(oxiranylmethoxy)methyl]- (9CI) (CA INDEX NAME)



IC C08G083-00; C08G008-10; C08G059-40

CC 36-6 (Plastics Manufacture and Processing)

ST glycidyloxymaleimide phenolic molding compn; maleimide glycidyoxy epoxy compn; **crosslinking** rapid epoxy phenolic compn

IT **Crosslinking**
 (of glass-filled epoxy resin-phenolic resin-glycidyloxymaleimide molding compns.)

IT 69861-04-7 69861-06-9

(molding compns., containing phenolic and epoxy resins,
rapid-curing)

L22 ANSWER 8 OF 11 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1979:421866 HCAPLUS
 DOCUMENT NUMBER: 91:21866
 TITLE: Thermosetting resin compositions
 INVENTOR(S): Nishikawa, Akio; Segawa, Masanori; Yokono,
 Tadashi
 PATENT ASSIGNEE(S): Hitachi, Ltd., Japan; Hitachi Chemical Co.,
 Ltd.
 SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

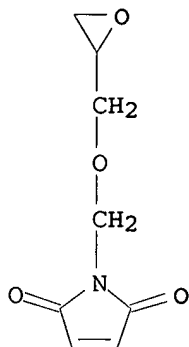
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 54004996	A2	19790116	JP 1977-69855	1977 0615
PRIORITY APPLN. INFO.:			JP 1977-69855	A 1977 0615

AB Soluble and readily-curable thermosetting resin compns. consist of an acid anhydride, N-(glycidyoxy)maleimide (I) [69861-04-7] or N-(glycidyloxymethyl)maleimide (II) [69861-06-9], and an epoxy resin. Thus, I, bisphenol A epoxy resin EP 828 (epoxy equivalent 175-210), tetrahydrophthalic acid [85-43-8], stearic acid, and epoxysilane KBM 403 in 100, 50, 5, 2, and 1 (or 100, 100, 10, 2, and 1; or 100, 200, 15, 2, and 1) weight ratio, were roll-blended with molten quartz glass powder (in an amount to give 30 weight% organic material) at 60-70° for 10 min to yield a molding composition curable at 180° within 3 min. A blended composition of II, DEN 431 (epoxy equivalent 172-79), and trimellitic anhydride [552-30-7] is soluble (>40%) in polar and ketone solvents.

IT 69861-06-9
 (epoxy resin composites containing anhydrides and, fast-curing)

RN 69861-06-9 HCAPLUS

CN 1H-Pyrrole-2,5-dione, 1-[(oxiranylmethoxy)methyl]- (9CI) (CA INDEX NAME)



IC C08G083-00; C08G059-40
 CC 36-6 (Plastics Manufacture and Processing)
 IT **Crosslinking agents**
 (anhydrides, for epoxy resin-glycidyloxymaleimide composites)
 IT 85-43-8 552-30-7
 (crosslinking agents, for epoxy resin-glycidyloxymaleimide composites)
 IT 69861-04-7 **69861-06-9**
 (epoxy resin composites containing anhydrides and, fast-curing)

L22 ANSWER 9 OF 11 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1979:405914 HCAPLUS
 DOCUMENT NUMBER: 91:5914
 TITLE: Thermosetting resin compositions
 INVENTOR(S): Nishikawa, Akio; Segawa, Masanori; Yokono, Tadashi
 PATENT ASSIGNEE(S): Hitachi, Ltd., Japan; Hitachi Chemical Co., Ltd.
 SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 54004998	A2	19790116	JP 1977-69853	1977 0615
PRIORITY APPLN. INFO.:			JP 1977-69853	A 1977 0615

AB Soluble and readily-curable thermosetting resin compns. are prepared and contain N-(glycidyloxy)maleimide (I) [69861-04-7] or N-(glycidyloxymethyl)maleimide (II) [69861-06-9] and an aminocarboxylic acid, e.g. 4,4'-diaminodiphenylmethane-3,3'-dicarboxylic acid (III) [7330-46-3]. Thus, a mixture containing I, epoxy resin EP 828 (epoxy equivalent 175-210), III, stearic acid, and epoxysilane at weight ratio 100:50:5:2:1 or 100:100:10:2:1; or 100:200:15:2:1 was roll-blended at 60-70° for 10 min with 70 weight% fused glass powder to yield a molding composition curable at

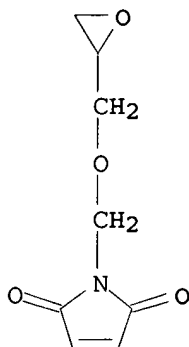
180° in 3 min. A blended composition of II, DEN 431 (epoxy equivalent 172-179), and III was soluble in polar and ketone solvents.

IT 69861-06-9

(epoxy resin composites containing aminocarboxylic acids and, fast-curing)

RN 69861-06-9 HCAPLUS

CN 1H-Pyrrole-2,5-dione, 1-[(oxiranylmethoxy)methyl]- (9CI) (CA INDEX NAME)



IC C08G073-02; C08G059-40; C08G069-44

CC 36-3 (Plastics Manufacture and Processing)

ST epoxy compn oxiranylmethylmaleimide; maleimide oxiranylmethyl epoxy compn; aminocarboxylic acid **crosslinker** epoxy compn; glycidylloxymethylmaleimide compn

IT **Crosslinking agents**

(aminocarboxylic acids, for epoxy resin-(glycidylloxy)-substituted maleimide composites)

IT 7330-46-3

(**crosslinking** agents, for epoxy resin-glycidylloxy-substituted maleimide composites)

IT 69861-04-7 69861-06-9

(epoxy resin composites containing aminocarboxylic acids and, fast-curing)

L22 ANSWER 10 OF 11 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1979:187380 HCAPLUS

DOCUMENT NUMBER: 90:187380

TITLE: Polymers containing maleimide groups in the side chain

AUTHOR(S): Shtil'man, M. I.; Zalukaeva, T. P.; Pushkina, L. I.; Korshak, V. V.

CORPORATE SOURCE: Moskv. Khim.-Tekhnol. Inst., Moscow, USSR

SOURCE: Vysokomolekulyarnye Soedineniya, Seriya B: Kratkie Soobshcheniya (1979), 21(2), 155-8
CODEN: VYSBAI; ISSN: 0507-5483

DOCUMENT TYPE: Journal

LANGUAGE: Russian

AB The title polymers were prepared by esterifying copolymers of maleic anhydride and styrene, vinyl glycidyl ether, allyl glycidyl ether, or glycidyl methacrylate with N-methylolmaleimide. The presence of the side-chain maleimide groups in the polymers permitted thermal **crosslinking**. The polymers have potential utility as reagents for various proteins.

IT 70226-47-0P 70226-48-1P 70226-49-2P

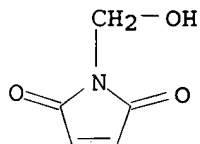
(preparation and soluble of)

RN 70226-47-0 HCAPLUS
 CN 2,5-Furandione, polymer with [(2-propenyloxy)methyl]oxirane,
 (2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)methyl ester (9CI) (CA
 INDEX NAME)

CM 1

CRN 5063-96-7

CMF C5 H5 N O3



CM 2

CRN 26297-89-2

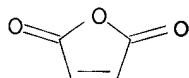
CMF (C6 H10 O2 . C4 H2 O3)x

CCI PMS

CM 3

CRN 108-31-6

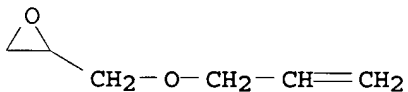
CMF C4 H2 O3



CM 4

CRN 106-92-3

CMF C6 H10 O2

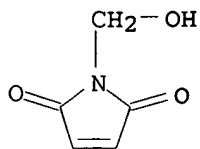


RN 70226-48-1 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, oxiranylmethyl ester, polymer with
 2,5-furandione, (2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)methyl ester
 (9CI) (CA INDEX NAME)

CM 1

CRN 5063-96-7

CMF C5 H5 N O3



CM 2

CRN 29631-98-9

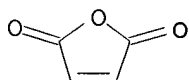
CMF (C7 H10 O3 . C4 H2 O3)x

CCI PMS

CM 3

CRN 108-31-6

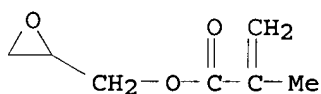
CMF C4 H2 O3



CM 4

CRN 106-91-2

CMF C7 H10 O3



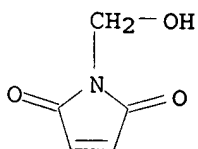
RN 70226-49-2 HCAPLUS

CN 2,5-Furandione, polymer with [(ethenyloxy)methyl]oxirane,
 (2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)methyl ester (9CI) (CA
 INDEX NAME)

CM 1

CRN 5063-96-7

CMF C5 H5 N O3



CM 2

CRN 43063-59-8

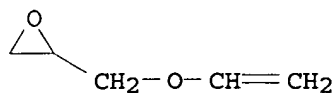
CMF (C5 H8 O2 . C4 H2 O3)x

CCI PMS

CM 3

CRN 3678-15-7

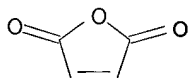
CMF C5 H8 O2



CM 4

CRN 108-31-6

CMF C4 H2 O3



CC 35-3 (Synthetic High Polymers)

IT 70226-47-0P 70226-48-1P 70226-49-2P

70226-50-5P

(preparation and soluble of)

L22 ANSWER 11 OF 11 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1979:153063 HCAPLUS

DOCUMENT NUMBER: 90:153063

TITLE: Heat-resistant epoxy resins

INVENTOR(S): Nishikawa, Akio; Segawa, Tadanori; Yokono, Hitoshi

PATENT ASSIGNEE(S): Hitachi, Ltd., Japan; Hitachi Chemical Co., Ltd.

SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 54004942	A2	19790116	JP 1977-69852	1977

0615

PRIORITY APPLN. INFO.: JP 1977-69852

A

1977
0615

AB Maleimide derivs. N-substituted with OH, hydroxyalkyl, or hydroxyaryl groups are treated with epichlorohydrin (I) [106-89-8], and the products are polymerized in the presence of polybutadiene (II) to give heat-resistant elec. insulators. Thus, 113 parts N-hydroxymaleimide [4814-74-8] was treated with 92.5

parts I in the presence of 44 parts NaOH to give N-glycidyloxymaleimide (III). A composition of III 100, epoxy resin (epoxy equivalent 172-210) 100, II 10, stearic acid 2, KBM 403 1, and powdered quartz 70 parts was mixed at 60-70° and molded 3 min at 180° to give test pieces having unaffected flexural strength (at 180°) after >40 days of heating at 200°.

IT 69861-07-0

(crosslinking agents for, polybutadiene as, for heat-resistant elec. insulators)

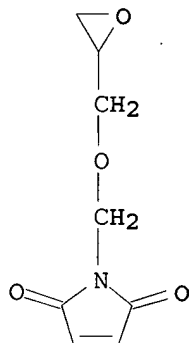
RN 69861-07-0 HCAPLUS

CN 1H-Pyrrole-2,5-dione, 1-[(oxiranylmethoxy)methyl]-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 69861-06-9

CMF C8 H9 N O4



IC C08L021-00

CC 36-6 (Plastics Manufacture and Processing)

ST heat resistance epoxy resin; glycidyloxymaleimide copolymer epoxy resin; polybutadiene epoxy resin **crosslinking**

IT **Crosslinking agents**

(polybutadiene, for maleimide group-containing epoxy resin elec. insulators)

IT 69861-05-8 69861-07-0

(crosslinking agents for, polybutadiene as, for heat-resistant elec. insulators)

IT 9003-17-2

(crosslinking agents, for poly(glycidyloxymaleimide), for heat-resistant elec. insulators)

=> d 123 1-12 ibib abs hitstr hitind

L23 ANSWER 1 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:809508 HCAPLUS

DOCUMENT NUMBER: 139:308378

TITLE: Active energy-curable varnishes for coatings, inks and adhesives and their curing method

INVENTOR(S): Ueda, Kiyoshi

PATENT ASSIGNEE(S): Dainippon Ink and Chemicals, Inc., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.

DOCUMENT TYPE: CODEN: JKXXAF
 LANGUAGE: Patent
 FAMILY ACC. NUM. COUNT: Japanese
 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003292830	A2	20031015	JP 2002-103683	2002 0405

PRIORITY APPLN. INFO.: JP 2002-103683
 2002
 0405

AB The varnish contains a compound having maleimide and isocyanate groups in a mol. The coating film of the active energy-curable composition containing the varnish without using **polymerization** initiator is cured by active energy ray irradiating and further cured by reacting with moisture in environmental atmospheric or hydroxy group in the coating film and has good adhesion to substrate. Thus, a coating composition comprising 30 parts maleimide derivative prepared from HDI, Sannix GP 1000 (glycerol polypropylene glycol ether) and N-(2-hydroxyethyl)maleimide, 40 parts maleimide derivative obtained from isophorone diisocyanate, Kurapol P 510 [poly(methylpentanediol adipate)] and N-(2-hydroxyethyl)maleimide, 10 parts Aronix M 400 (dipentaerythritol hexaacrylate), 20 parts Kayarad MANDA {(2,2-dimethyl-1,3-propanediyl)bis[oxy(2,2-dimethyl-3-oxo-3,1-propanediyl)] diacrylate} and 1 part G 2000A was coated on an Al plate, and UV-cured to give a coating film showing good UV curability and adhesion.

IT 612489-35-7P 612489-38-0P
 (active energy-curable varnishes for coatings, inks and adhesives)

RN 612489-35-7 HCAPLUS

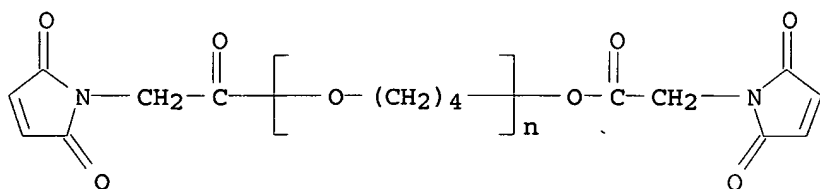
CN 2-Propenoic acid, (2,2-dimethyl-1,3-propanediyl)bis[oxy(2,2-dimethyl-3-oxo-3,1-propanediyl)] ester, polymer with Aronix M 9050, α -[(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)acetyl]- ω -[[[(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)acetyl]oxy]poly(oxy-1,4-butanediyl), α -hydro- ω -hydroxypoly(oxy-1,2-ethanediyl), 1-(hydroxymethyl)-1H-pyrrole-2,5-dione, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane, tetrahydrofuran and tetrahydro-3-methylfuran (9CI) (CA INDEX NAME)

CM 1

CRN 216249-51-3

CMF (C4 H8 O)n C12 H8 N2 O7

CCI PMS



CM 2

CRN 133975-88-9

CMF Unspecified

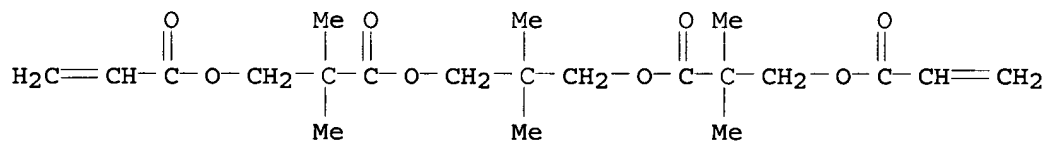
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

CRN 90780-31-7

CMF C21 H32 O8

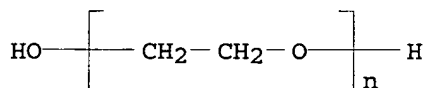


CM 4

CRN 25322-68-3

$$\text{CMF} \quad (\text{C}_2 \text{ H}_4 \text{ O})_n \text{ H}_2 \text{ O}$$

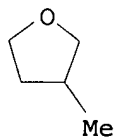
CCI PMS



CM 5

CRN 13423-15-9

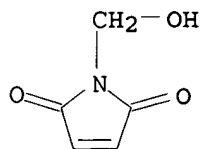
CMF C5 H10 O



CM 6

CRN 5063-96-7

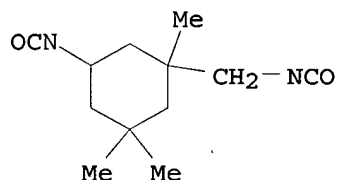
CMF C5 H5 N O3



CM 7

CRN 4098-71-9

CMF C12 H18 N2 O2



CM 8

CRN 109-99-9

CMF C4 H8 O



RN 612489-38-0 HCAPLUS

CN 1H-Pyrrole-2,5-dione, 1-(hydroxymethyl)-, polymer with Aronix M 9050, α -hydro- ω -hydroxypoly(oxy-1,2-ethanediyl), 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane, tetrahydrofuran and tetrahydro-3-methylfuran (9CI) (CA INDEX NAME)

CM 1

CRN 133975-88-9

CMF Unspecified

CCI PMS, MAN

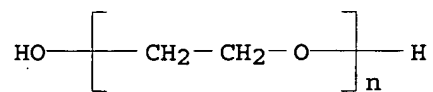
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 25322-68-3

CMF (C2 H4 O)_n H2 O

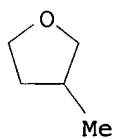
CCI PMS



CM 3

CRN 13423-15-9

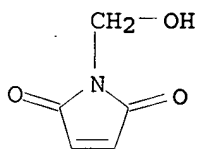
CMF C5 H10 O



CM 4

CRN 5063-96-7

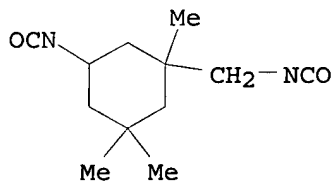
CMF C5 H5 N O3



CM 5

CRN 4098-71-9

CMF C12 H18 N2 O2



CM 6

CRN 109-99-9

CMF C4 H8 O



IC ICM C09D004-00
ICS B05D007-24; C09D011-00; C09D175-14; C09J004-00

CC 37-6 (Plastics Manufacture and Processing)
Section cross-reference(s): 38, 42

ST maleimide polyurethane varnish active energy curability; coating
maleimide polyoxyalkylene polyurethane acrylic **polymer**;
ink maleimide polyoxyalkylene polyurethane acrylic **polymer**
; adhesive polyoxyalkylene polyurethane acrylic **polymer**

IT 612489-34-6P 612489-35-7P 612489-36-8P 612489-37-9P
612489-38-0P
(active energy-curable varnishes for coatings, inks and
adhesives)

L23 ANSWER 2 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:495492 HCAPLUS

DOCUMENT NUMBER: 140:187157

TITLE: Targeting adenoviral vectors using
heterofunctional polyethylene glycol FGF2
conjugates

AUTHOR(S): Lanciotti, Julia; Song, Antonius; Doukas,
John; Sosnowski, Barbara; Pierce, Glenn;
Gregory, Richard; Wadsworth, Samuel;
O'Riordan, Catherine

CORPORATE SOURCE: Genzyme Corporation, Framingham, MA, 01701,
USA

SOURCE: Molecular Therapy (2003), 8(1), 99-107
CODEN: MTOHCK; ISSN: 1525-0016

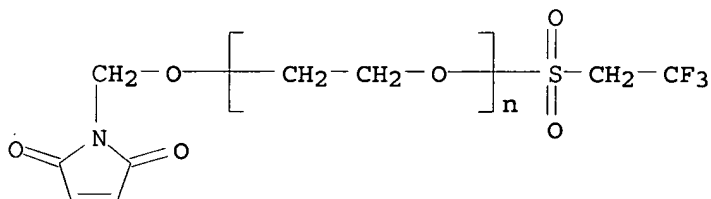
PUBLISHER: Elsevier

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Bifunctional PEG (polyethylene glycol) mols. provide a novel
approach to retargeting viral vectors without the need to
genetically modify the vector. In a previous report we showed
that modification of the viral capsid by the addition of a peptide
with binding preference for differentiated ciliated airway
epithelia allowed gene delivery to those cells by a novel entry
pathway. Here we demonstrate further the versatility of this
method by coupling a protein, FGF2, to the surface of an
adenovirus (Ad). This modification results in the elimination of
the endogenous tropism of the virus and confers upon the virus a
novel route of entry. Adenoviral vectors modified by the addition of
FGF2 show enhanced efficiency of transduction of the ovarian
cancer cell line SKOV3.i.p.1. This enhancement in transduction is
dependent on the binding of the coupled FGF2 to its high-affinity
receptor and is independent of coxsackie and adenovirus viral
receptors. In an i.p. model of ovarian cancer, Ad/PEG/FGF2
generates increased transgene expression in tumor tissue compared
to unmodified Ad. Furthermore, **polymer** modification of
adenovirus vectors results in reduced localization of adenovirus
to nontarget tissues and a marked decrease in Th1 and Th2 T cell
responses. In conclusion, the approach described here may lead to
the development of a gene therapy vector capable of targeting a
therapeutic gene to diseased cells, while minimizing toxicity and
expression in other tissues.

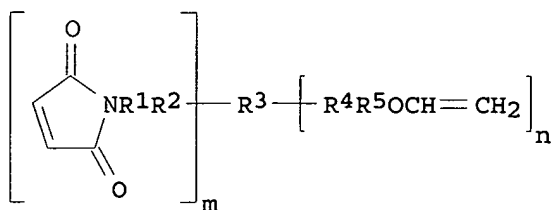
IT 657401-87-1DP, conjugates with adenoviral protein and FGF2
 (targeting adenoviral vectors using heterofunctional
 polyethylene glycol FGF2 conjugates)
 RN 657401-87-1 HCAPLUS
 CN Poly(oxy-1,2-ethanediyl), α -[(2,2,2-trifluoroethyl)sulfonyl]-
 ω -[(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)methoxy]- (9CI)
 (CA INDEX NAME)



CC 63-6 (Pharmaceuticals)
 IT 657401-87-1DP, conjugates with adenoviral protein and FGF2
 (targeting adenoviral vectors using heterofunctional
 polyethylene glycol FGF2 conjugates)
 REFERENCE COUNT: 50 THERE ARE 50 CITED REFERENCES AVAILABLE
 FOR THIS RECORD. ALL CITATIONS AVAILABLE
 IN THE RE FORMAT

L23 ANSWER 3 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2002:205111 HCAPLUS
 DOCUMENT NUMBER: 136:248414
 TITLE: Maleimide vinyl ether derivatives and their
 photocurable resin compositions
 INVENTOR(S): Watanabe, Takashi
 PATENT ASSIGNEE(S): Sekisui Chemical Co. Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 31 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002080509	A2	20020319	JP 2000-267376	2000 0904
PRIORITY APPLN. INFO.:			JP 2000-267376	2000 0904
OTHER SOURCE(S):			MARPAT 136:248414	
GI				



I

AB The compds. I [m, n = 1-5; m + n = 2-6; R¹, R⁵ = aliphatic, aromatic hydrocarbon chain; R², R⁴ = ether, ester, urethane, or carbonate linkage, R³ = aliphatic, aromatic hydrocarbon chain, (poly)ether chain, (poly)ester, (poly)urethane, (poly)carbonate chain or their residues (average mol. weight 40-100,000) with aliphatic or aromatic group connected with ether, ester, urethane, and/or carbonate linkage] are claimed. Thus, isophorone diisocyanate reacted with PTGL 1000, N-hydroxymethylmaleimide, and ethylene glycol monovinyl ether to give a maleimide derivative showing good UV curability, gelation, and scratch resistance.

IT 404590-05-2P 404590-23-4P
(maleimide vinyl ether derivs. and their photocurable resin compns.)

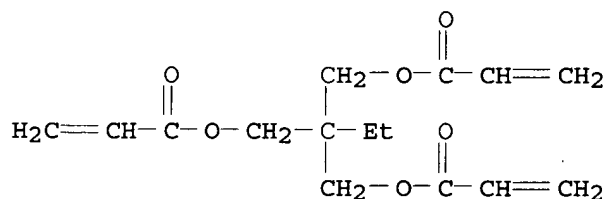
RN 404590-05-2 HCAPLUS

CN 2-Propenoic acid, 2-ethyl-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester, polymer with 2-(ethenyloxy)ethanol adduct with α-hydro-ω-hydroxypoly(oxy-1,2-ethanediyl), 1-(hydroxymethyl)-1H-pyrrole-2,5-dione and 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane (1:1:1:2) (9CI) (CA INDEX NAME)

CM 1

CRN 15625-89-5

CMF C15 H20 O6



CM 2

CRN 404590-03-0

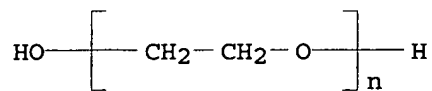
CMF C12 H18 N2 O2 . 1/2 C5 H5 N O3 . 1/2 C4 H8 O2 . 1/2 (C2 H4 O)_n H2 O

CM 3

CRN 25322-68-3

CMF (C2 H4 O)_n H2 O

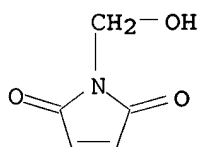
CCI PMS



CM 4

CRN 5063-96-7

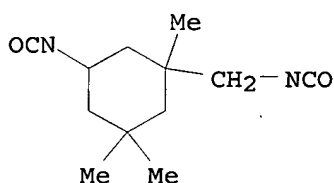
CMF C5 H5 N O3



CM 5

CRN 4098-71-9

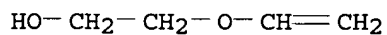
CMF C12 H18 N2 O2



CM 6

CRN 764-48-7

CMF C4 H8 O2



RN 404590-23-4 HCAPLUS

CN 2-Propenoic acid, ester with 2,2'-[oxybis(methylene)]bis[2-(hydroxymethyl)-1,3-propanediol], polymer with 2-(ethenyl)oxyethanol adduct with α -hydroxyhydroxypoly(oxy-1,4-butanediyl), 1-(hydroxymethyl)-1H-pyrrole-2,5-dione and 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane (1:1:1:2) (9CI) (CA INDEX NAME)

CM 1

CRN 404590-02-9

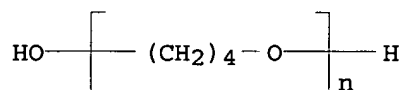
CMF C12 H18 N2 O2 . 1/2 C5 H5 N O3 . 1/2 C4 H8 O2 . 1/2 (C4 H8 O)n H2 O

CM 2

CRN 25190-06-1

CMF (C4 H8 O)_n H2 O

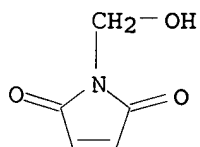
CCI PMS



CM 3

CRN 5063-96-7

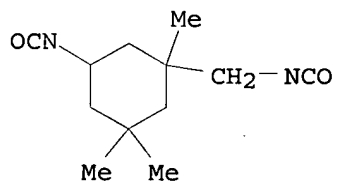
CMF C5 H5 N O3



CM 4

CRN 4098-71-9

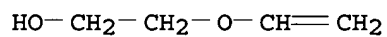
CMF C12 H18 N2 O2



CM 5

CRN 764-48-7

CMF C4 H8 O2



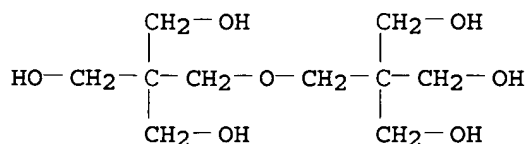
CM 6

CRN 77641-99-7

CMF C10 H22 O7 . x C3 H4 O2

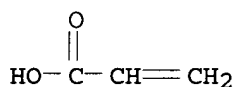
CM 7

CRN 126-58-9
CMF C10 H22 O7



CM 8

CRN 79-10-7
CMF C3 H4 O2

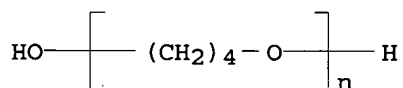


IT 404590-02-9P 404590-03-0P 404590-22-3P
404594-13-4P
(maleimide vinyl ether derivs. and their photocurable resin
compsns.)

RN 404590-02-9 HCAPLUS
CN 1H-Pyrrole-2,5-dione, 1-(hydroxymethyl)-, adduct with
2-(ethenyloxy)ethanol, α -hydro- ω -hydroxypoly(oxy-1,4-
butanediyl) and 5-isocyanato-1-(isocyanatomethyl)-1,3,3-
trimethylcyclohexane (1:1:1:2) (9CI) (CA INDEX NAME)

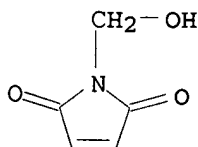
CM 1

CRN 25190-06-1
CMF (C4 H8 O)_n H2 O
CCI PMS



CM 2

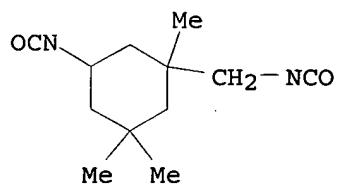
CRN 5063-96-7
CMF C5 H5 N O3



CM 3

CRN 4098-71-9

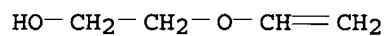
CMF C12 H18 N2 O2



CM 4

CRN 764-48-7

CMF C4 H8 O2



RN 404590-03-0 HCAPLUS

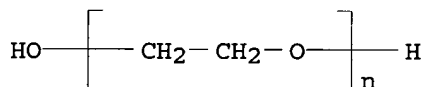
CN 1H-Pyrrole-2,5-dione, 1-(hydroxymethyl)-, adduct with
2-(ethenyloxy)ethanol, α -hydro- ω -hydroxypoly(oxy-1,2-
ethanediyl) and 5-isocyanato-1-(isocyanatomethyl)-1,3,3-
trimethylcyclohexane (1:1:1:2) (9CI) (CA INDEX NAME)

CM 1

CRN 25322-68-3

CMF (C2 H4 O)_n H2 O

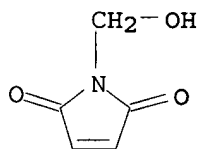
CCI PMS



CM 2

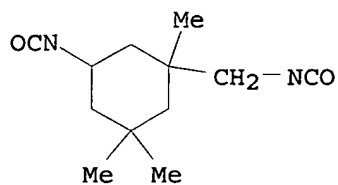
CRN 5063-96-7

CMF C5 H5 N O3



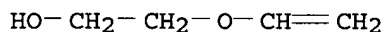
CM 3

CRN 4098-71-9
CMF C12 H18 N2 O2



CM 4

CRN 764-48-7
CMF C4 H8 O2

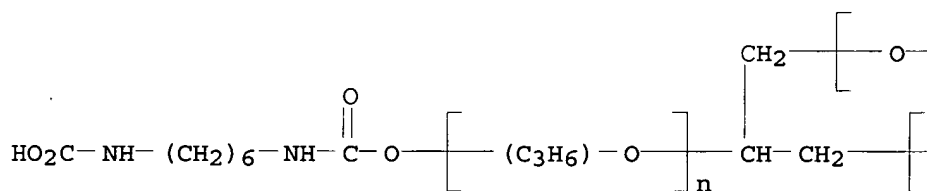


RN 404590-22-3 HCAPLUS
CN Poly[oxy(methyl-1,2-ethanediyl)], $\alpha, \alpha', \alpha''$ -1,2,3-propanetriyltris[ω -[[[6-(carboxyamino)hexyl]amino]carbonyl]oxy]-, (2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)methyl 2-(ethenyloxy)ethyl ester (9CI) (CA INDEX NAME)

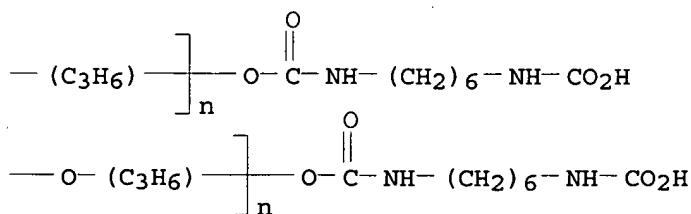
CM 1

CRN 404590-21-2
CMF (C3 H6 O)_n (C3 H6 O)_n (C3 H6 O)_n C27 H50 N6 O12
CCI IDS, PMS

PAGE 1-A



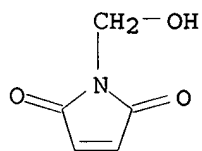
PAGE 1-B



CM 2

CRN 5063-96-7

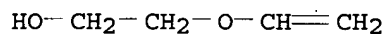
CMF C5 H5 N O3



CM 3

CRN 764-48-7

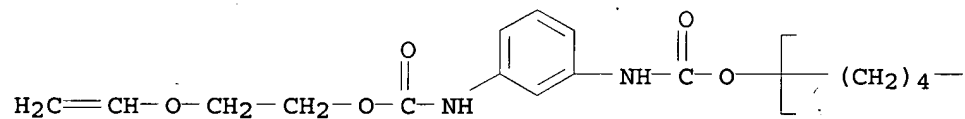
CMF C4 H8 O2



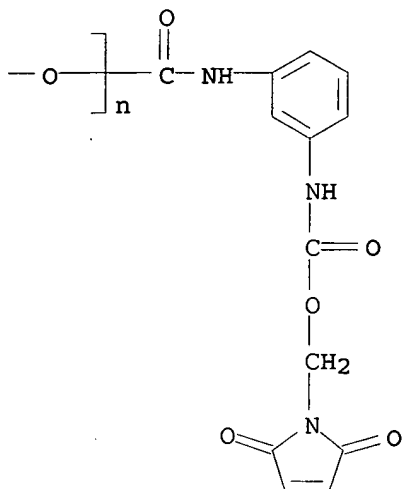
RN 404594-13-4 HCAPLUS

CN Poly(oxy-1,4-butanediyl), α -[[[3-[[[(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)methoxy]carbonyl]amino]methylphenyl]amino]carbonyl]-
 ω -[[[3-[[[2-(ethenyloxy)ethoxy]carbonyl]amino]methylphenyl]
 amino]carbonyl]oxy]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



PAGE 2-A

2 (D1-Me)

- IC ICM C08F002-46
ICS C08F290-06; C08F299-02; C08G018-83; C08G063-91; C08G064-42;
C08G065-329
- CC 37-6 (Plastics Manufacture and Processing)
Section cross-reference(s): 42
- IT 2973-09-3DP, N-Butylmaleimide, **polymers** with
IPDI/polyester adducts with hydroxyethylmaleimides/hydroxyethyl
vinyl ethers 12542-30-2DP, FA 511A, **polymers** with
ethoxylated IPDI urethanes 16669-59-3DP, Wasmer IBM,
polymers with IPDI/polyester adducts with
hydroxyethylmaleimides/hydroxyethyl vinyl ethers 26570-48-9DP,
Kayarad PEG 400DA, **polymers** with IPDI/polyester adducts
with hydroxyethylmaleimides/hydroxyethyl vinyl ethers
62886-89-9DP, Aronix M 8060, **polymers** with ethoxylated
IPDI urethanes 85091-74-3DP, **polymers** with
IPDI/polyester adducts with hydroxyethylmaleimides/hydroxyethyl
vinyl ethers **404590-05-2P 404590-23-4P**
(maleimide vinyl ether derivs. and their photocurable resin
compsns.)
- IT 1585-90-6P 5063-96-7P, N-Hydroxymethylmaleimide 39751-34-3P
55750-53-3P 58991-77-8DP, adducts with IPDI and
hydroxyethylmaleimides/hydroxyethyl vinyl ethers, **polymers**
with acrylates **404590-02-9P 404590-03-0P**
404590-04-1DP, adducts with hydroxyethylmaleimides/hydroxyethyl
vinyl ethers, **polymers** with acrylates **404590-06-3P**
404590-22-3P 404594-13-4P
(maleimide vinyl ether derivs. and their photocurable resin
compsns.)

L23 ANSWER 4 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2001:283948 HCAPLUS

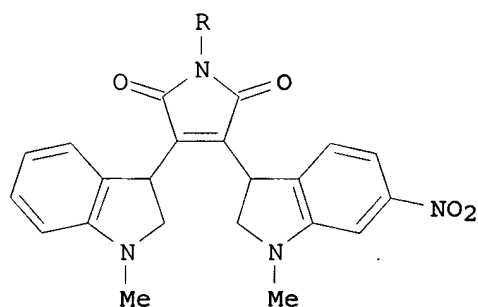
USHA SHRESTHA EIC 1700 REM 4B28

DOCUMENT NUMBER: 134:295734
 TITLE: Preparation of substituted pyrroles as antiproliferative agents for the treatment of cancer
 INVENTOR(S): Fotouhi, Nader; Kong, Norman; Liu, Emily Aijun; Lovey, Allen John; Mullin, John Guilfoyle, Jr.
 PATENT ASSIGNEE(S): F. Hoffmann-La Roche A.-G., Switz.
 SOURCE: PCT Int. Appl., 60 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001027106	A1	20010419	WO 2000-EP9635	2000 1002
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2385071	AA	20010419	CA 2000-2385071	2000 1002
BR 2000014680	A	20020611	BR 2000-14680	2000 1002
EP 1224181	A1	20020724	EP 2000-969381	2000 1002
EP 1224181	B1	20031203		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
TR 200200987	T2	20020923	TR 2002-200200987	2000 1002
JP 2003511449	T2	20030325	JP 2001-530324	2000 1002
AT 255576	E	20031215	AT 2000-969381	2000 1002
NZ 518038	A	20040227	NZ 2000-518038	2000 1002
PT 1224181	T	20040430	PT 2000-969381	2000 1002
ES 2210005	T3	20040701	ES 2000-969381	2000

AU 781732	B2	20050609	AU 2000-79116	1002
				2000
				1002
US 6559164	B1	20030506	US 2000-678521	2000
				1003
ZA 2002002231	A	20030619	ZA 2002-2231	2002
				0319
NO 2002001718	A	20020411	NO 2002-1718	2002
				0411
HK 1050533	A1	20050107	HK 2003-102759	2003
				0416
PRIORITY APPLN. INFO.:			US 1999-158860P	P
				1999
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				2000
				1002

OTHER SOURCE(S): MARPAT 134:295734
GI



I

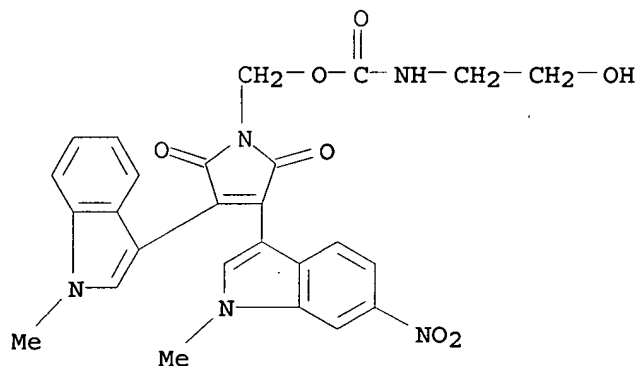
AB Substituted pyrroles I [R = CH₂OP(O)(R₁)R₂, CH₂OH, CH₂OCOR₃, CH₂OCO₂R₃, CH₂CONHR₃, CONHR₃ and R₁, R₂ = H, Na, NH₄ and R₃ = alkyl] were prepared. These compds. and their pharmaceutically acceptable salts are suitable for administration to patients as continuous infusion solution and are useful in the treatment and/or control of cell proliferative disorders, in particular cancer. E.g., to a cold solution of 3-(1-methyl-3-indolyl)-4-(1-methyl-6-nitro-3-indolyl)-1H-pyrrole-2,5-dione in THF was added dropwise n-butyllithium. The resulting red suspension was stirred for 15 min.; bis(p-nitrophenyl)carbonate was then added. 4-Aminobutanol in THF was added to afford 3-(1-methyl-1H-indol-3-yl)-4-(1-methyl-6-nitro-1H-indol-3-yl)-2,5-dioxo-2,5-dihydropyrrole-1-carboxylic acid (4-hydroxybutyl)amide (43%).

IT 334931-95-2P

(preparation of substituted pyrroles as antiproliferative agents for the treatment of cancer)

RN 334931-95-2 HCAPLUS

CN Carbamic acid, (2-hydroxyethyl)-, [2,5-dihydro-3-(1-methyl-1H-indol-3-yl)-4-(1-methyl-6-nitro-1H-indol-3-yl)-2,5-dioxo-1H-pyrrol-1-yl]methyl ester (9CI) (CA INDEX NAME)



IT 334931-79-2P 334931-94-1P 334931-96-3P

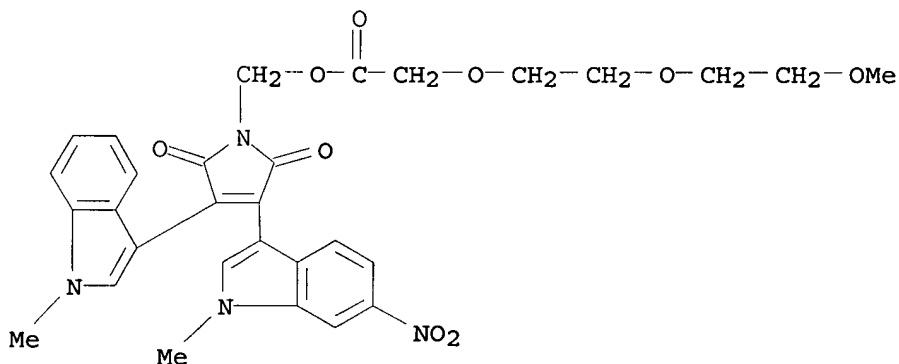
334932-02-4DP, polymer bound

334932-09-1P

(preparation of substituted pyrroles as antiproliferative agents for the treatment of cancer)

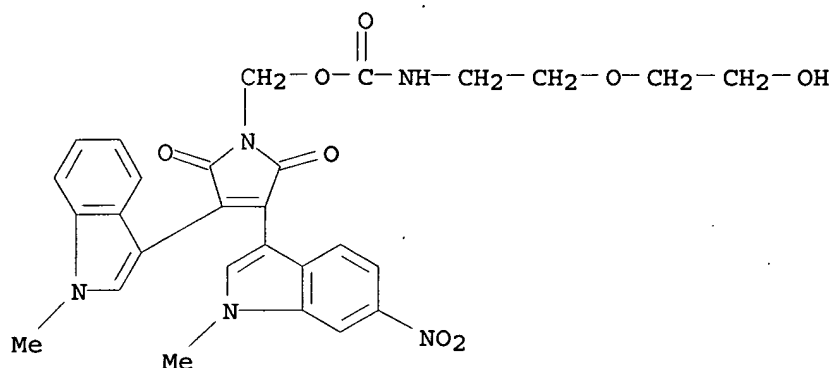
RN 334931-79-2 HCAPLUS

CN Acetic acid, [2-(2-methoxyethoxy)ethoxy]-, [2,5-dihydro-3-(1-methyl-1H-indol-3-yl)-4-(1-methyl-6-nitro-1H-indol-3-yl)-2,5-dioxo-1H-pyrrol-1-yl]methyl ester (9CI) (CA INDEX NAME)



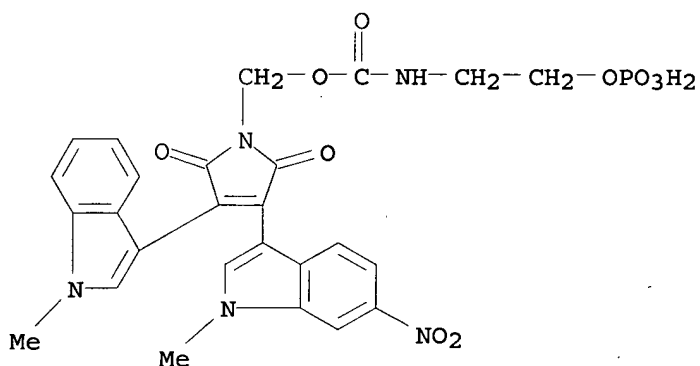
RN 334931-94-1 HCAPLUS

CN Carbamic acid, [2-(2-hydroxyethoxy)ethyl]-, [2,5-dihydro-3-(1-methyl-1H-indol-3-yl)-4-(1-methyl-6-nitro-1H-indol-3-yl)-2,5-dioxo-1H-pyrrol-1-yl]methyl ester (9CI) (CA INDEX NAME)



RN 334931-96-3 HCAPLUS

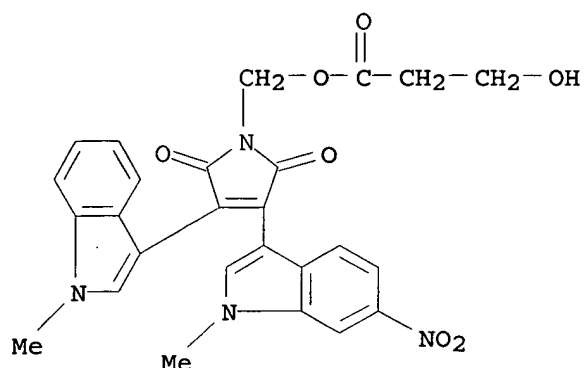
CN Carbamic acid, [2-(phosphonooxy)ethyl]-, C-[[2,5-dihydro-3-(1-methyl-1H-indol-3-yl)-4-(1-methyl-6-nitro-1H-indol-3-yl)-2,5-dioxo-1H-pyrrol-1-yl]methyl] ester, disodium salt (9CI) (CA INDEX NAME)



● 2 Na

RN 334932-02-4 HCAPLUS

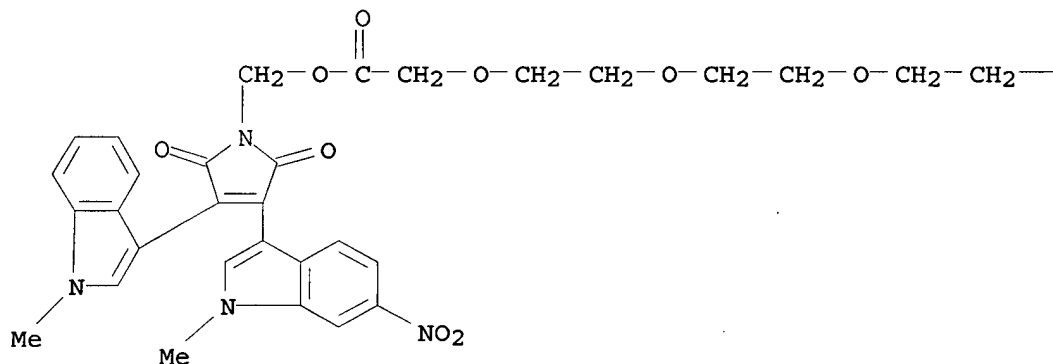
CN Propanoic acid, 3-hydroxy-, [2,5-dihydro-3-(1-methyl-1H-indol-3-yl)-4-(1-methyl-6-nitro-1H-indol-3-yl)-2,5-dioxo-1H-pyrrol-1-yl]methyl ester (9CI) (CA INDEX NAME)



RN 334932-09-1 HCAPLUS

CN 3,6,9,12-Tetraoxatetradecanedioic acid, mono[[2,5-dihydro-3-(1-methyl-1H-indol-3-yl)-4-(1-methyl-6-nitro-1H-indol-3-yl)-2,5-dioxo-1H-pyrrol-1-yl]methyl] ester (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

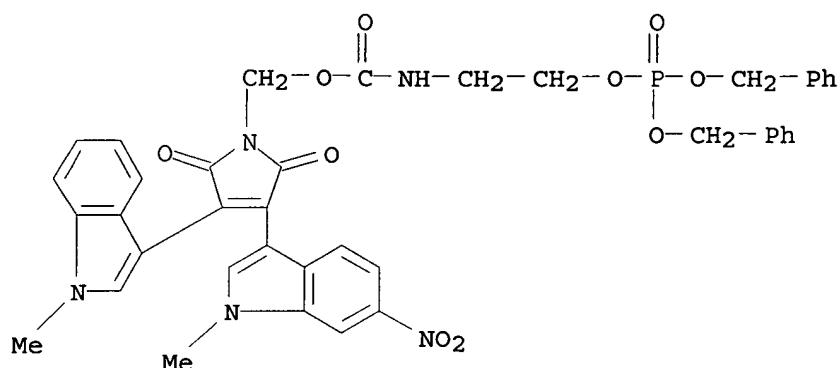
— O—CH₂—CO₂H

IT 334932-28-4P

(preparation of substituted pyrroles as antiproliferative agents for the treatment of cancer)

RN 334932-28-4 HCAPLUS

CN Phosphoric acid, 2-[[[2,5-dihydro-3-(1-methyl-1H-indol-3-yl)-4-(1-methyl-6-nitro-1H-indol-3-yl)-2,5-dioxo-1H-pyrrol-1-yl]methoxy]carbonyl]amino]ethyl bis(phenylmethyl) ester (9CI) (CA INDEX NAME)



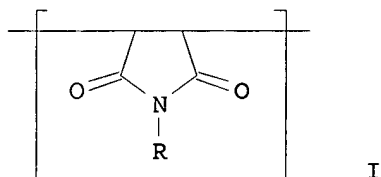
IC ICM C07D403-14
 ICS C07D401-14; A61K031-4015; A61K031-404; A61P035-00
 CC 27-10 (Heterocyclic Compounds (One Hetero Atom))
 Section cross-reference(s): 1, 63
 IT 334931-76-9P 334931-83-8P 334931-84-9P **334931-95-2P**
 334931-99-6P 334932-12-6P
 (preparation of substituted pyrroles as antiproliferative agents for
 the treatment of cancer)
 IT 334931-74-7P 334931-75-8P 334931-77-0P 334931-78-1P
334931-79-2P 334931-81-6P 334931-85-0P 334931-86-1P
 334931-88-3P 334931-89-4DP, **polymer bound**
 334931-90-7P 334931-91-8DP, **polymer bound**
 334931-92-9P 334931-93-0P **334931-94-1P**
334931-96-3P 334931-97-4P 334931-98-5P 334932-00-2P
 334932-01-3DP, **polymer bound** **334932-02-4DP**,
polymer bound 334932-04-6P 334932-05-7P 334932-06-8P
 334932-07-9P 334932-08-0P **334932-09-1P** 334932-10-4P
 (preparation of substituted pyrroles as antiproliferative agents for
 the treatment of cancer)
 IT 79-14-1DP, **polymer bound** 99-96-7DP, **polymer**
 bound 120-47-8DP, **polymer bound** 67317-62-8P
 156745-33-4P 287963-50-2P 334932-17-1P 334932-19-3P
 334932-21-7P 334932-23-9P 334932-25-1P 334932-27-3P
334932-28-4P 334932-29-5P
 (preparation of substituted pyrroles as antiproliferative agents for
 the treatment of cancer)
 REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE
 FOR THIS RECORD. ALL CITATIONS AVAILABLE
 IN THE RE FORMAT

L23 ANSWER 5 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1999:781003 HCAPLUS
 DOCUMENT NUMBER: 132:42826
 TITLE: Positively-working photosensitive composition
 containing **polymer** with
 maleimide-derived structure
 INVENTOR(S): Kawabe, Yasumasa; Mizutani, Kazuyoshi; Sato,
 Kenichiro
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 14 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11338151	A2	19991210	JP 1998-147688	1998 0528
PRIORITY APPLN. INFO.:			JP 1998-147688	1998 0528

GI



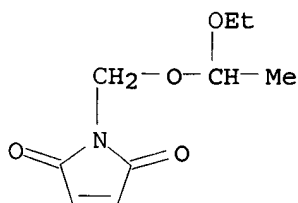
AB The title photosensitive composition contains (a) a **polymer** having structural unit I [$R = (CR_1R_2)_nCO_2R_3$, $CH_2OCR_3R_4OR_6$; $R_1, R_2, R_4, R_5 = H, Me$; $R_3, R_6 = \text{alkyl, cyclic alkyl, cyclic ether, lactone (these groups may be substituted); } n = 0, 1]$, alicyclic structural units, and acid-cleavable group, (b) a compound generating an acid under active beam irradiation or radiation irradiation, (c) a N-containing basic compound, and (d) a F-type and/or Si-type surfactant. The composition shows high sensitivity toward deep UV, especially, ArF excimer laser beams, and improved developability and provides a high resolution pattern with good dry etching resistance and profile and high residual film rate.

IT 120461-73-6P

(monomer; pos.-working photoresist containing **polymer** with maleimide-derived structure, alicyclic structure, and acid-cleavable group)

RN 120461-73-6 HCAPLUS

CN 1H-Pyrrole-2,5-dione, 1-[(1-ethoxyethoxy)methyl]- (9CI) (CA INDEX NAME)



IT 252238-45-2P

(pos.-working photoresist containing **polymer** with maleimide-derived structure, alicyclic structure, and acid-cleavable group)

RN 252238-45-2 HCAPLUS

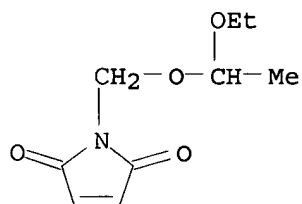
CN 1H-Pyrrole-2,5-dione, 1-[(1-ethoxyethoxy)methyl]-, polymer with

1,4-cyclooctadiene (9CI) (CA INDEX NAME)

CM 1

CRN 120461-73-6

CMF C9 H13 N O4



CM 2

CRN 1073-07-0

CMF C8 H12



- IC ICM G03F007-039
ICS G03B027-32; G03F007-004; G03F007-20; H01L021-027
- CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38, 46, 76
- ST pos working photoresist far UV sensitive; excimer laser sensitive
pos working photoresist; alicyclic acid cleavable group
substituted **polymer**; maleimide **polymer** pos
working photoresist; acid cleavable
- IT Polysiloxanes, uses
(KP 341, surfactant; in pos.-working photoresist containing **polymer** with maleimide-derived structure, alicyclic structure, and acid-cleavable group)
- IT Sputtering
Sputtering
(etching, reactive; pos.-working photoresist containing **polymer** with maleimide-derived structure, alicyclic structure, and acid-cleavable group resistant to)
- IT Semiconductor device fabrication
(pos.-working photoresist containing **polymer** with maleimide-derived structure, alicyclic structure, and acid-cleavable group for)
- IT Excimer lasers
(pos.-working photoresist containing **polymer** with maleimide-derived structure, alicyclic structure, and acid-cleavable group sensitive to)
- IT Etching
Etching
(sputter, reactive; pos.-working photoresist containing **polymer** with maleimide-derived structure, alicyclic

- structure, and acid-cleavable group resistant to)
- IT 81-25-4, Cholic acid 865-47-4
(acid-decomposable compound from; in pos.-working photoresist containing **polymer** with maleimide-derived structure, alicyclic structure, and acid-cleavable group)
- IT 100-97-0, uses 280-57-9, 1,4-Diazabicyclo[2,2,2]octane 3001-72-7, 1,5-Diazabicyclo[4.3.0]-5-nonene 6674-22-2 122387-65-9
(in pos.-working photoresist containing **polymer** with maleimide-derived structure, alicyclic structure, and acid-cleavable group)
- IT 50711-89-2P, Cholic acid chloride
(intermediate, acid-decomposable compound from; in pos.-working photoresist containing **polymer** with maleimide-derived structure, alicyclic structure, and acid-cleavable group)
- IT 107-59-5, tert-Butyl chloroacetate 541-59-3, Maleimide
(monomer from; pos.-working photoresist containing **polymer** with maleimide-derived structure, alicyclic structure, and acid-cleavable group)
- IT 105726-18-9P 114650-82-7P 120461-73-6P
(monomer; pos.-working photoresist containing **polymer** with maleimide-derived structure, alicyclic structure, and acid-cleavable group)
- IT 252238-43-0P 252238-44-1P 252238-45-2P 252238-46-3P 252238-47-4P
(pos.-working photoresist containing **polymer** with maleimide-derived structure, alicyclic structure, and acid-cleavable group)
- IT 109-92-2 5063-96-7
(pos.-working photoresist containing **polymer** with maleimide-derived structure, alicyclic structure, and acid-cleavable group)
- IT 137462-24-9, Megafac F 176 216679-67-3, Megafac R08
(surfactant; in pos.-working photoresist containing **polymer** with maleimide-derived structure, alicyclic structure, and acid-cleavable group)

L23 ANSWER 6 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1995:520378 HCAPLUS

DOCUMENT NUMBER: 122:265237

TITLE: Preparation of spirofulgide and -fulgimide analogs as photochromic compounds

INVENTOR(S): Imura, Satoshi; Tanizawa, Tsuneyoshi; Kobayakawa, Takashi

PATENT ASSIGNEE(S): Tokuyama Corp., Japan

SOURCE: Eur. Pat. Appl., 69 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	
EP 629626	A2	19941221	EP 1994-304140	1994 0608
EP 629626	A3	19950301		
EP 629626	B1	19991027		

R: DE, ES, FR, IT				
JP 07002824	A2	19950106	JP 1993-141023	1993 0611
JP 3138117	B2	20010226		
AU 9464634	A1	19941215	AU 1994-64634	1994 0608
AU 679513	B2	19970703		
ES 2140506	T3	20000301	ES 1994-304140	1994 0608
US 5708063	A	19980113	US 1996-601832	1996 0215
PRIORITY APPLN. INFO.:			JP 1993-141023	A 1993 0611
			US 1994-258064	B1 1994 0610

OTHER SOURCE(S): MARPAT 122:265237

GI For diagram(s), see printed CA Issue.

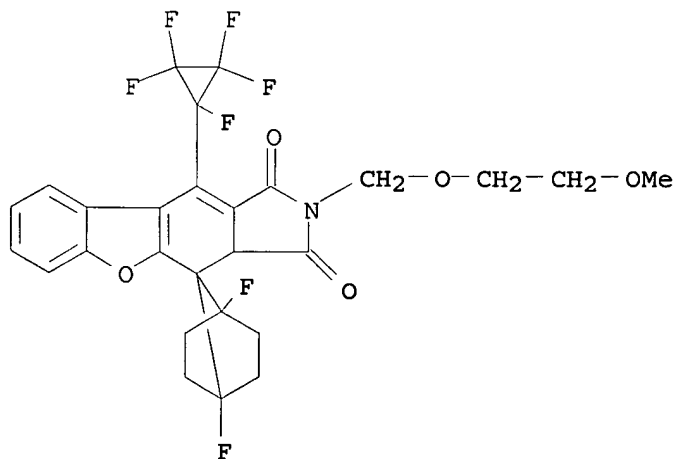
AB Title compds. [I; R = (un)substituted cyclopropyl; X = O, NR11, NA1B1A2mB2nR12, NA3R4; A1-A3 = (cyclo)alkylene, alkylidene, etc.; B1,B2 = CO, CO2, CONH, etc.; R4 = naphthyl, halo, cyano, NO2; R11 = H, alkyl, aryl; R12 = alkyl, naphthyl(alkyl), etc.; Y = atoms to form an aromatic or heterocyclic ring; Z = atoms to form a norbornyl, bicyclo[3.3.1]nonyl, or adamantyl ring system; m,n = 0 or 1; M = 0 = n] were prepared. Thus, fulgide II was condensed with H2NCH2CO2Me and the product refluxed in AcCl to give fulgimide III (X = NCH2CO2Me). Data for photochromic activity of I were given.

IT 162689-37-4P 162689-52-3P 162689-62-5P

(preparation of spirofulgide and -fulgimide analogs as photochromic compds.)

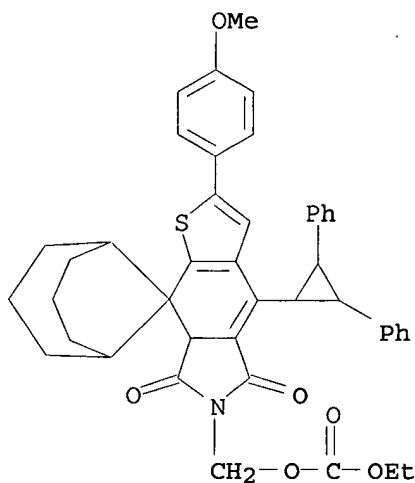
RN 162689-37-4 HCAPLUS

CN Spiro[4H-benzofuro[2,3-f]isoindole-4,7'-bicyclo[2.2.1]heptane]-1,3(2H,3aH)-dione, 1',4'-difluoro-2-[(2-methoxyethoxy)methyl]-10-(pentafluorocyclopropyl)- (9CI) (CA INDEX NAME)



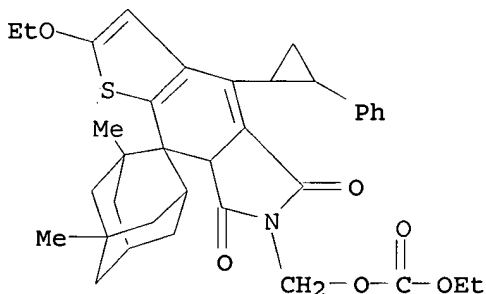
RN 162689-52-3 HCAPLUS

CN Carbonic acid, [7',7'a-dihydro-4'-(2,3-diphenylcyclopropyl)-2'-(4-methoxyphenyl)-5',7'-dioxospiro[bicyclo[3.3.1]nonane-9,8'-[8H]thieno[2,3-f]isoindol]-6'(5'H)-yl]methyl ethyl ester (9CI)
(CA INDEX NAME)



RN 162689-62-5 HCAPLUS

CN Carbonic acid, [2-ethoxy-7,7a-dihydro-1',5'-dimethyl-5,7-dioxo-4-(2-phenylcyclopropyl)spiro[8H-thieno[2,3-f]isoindole-8,2'-tricyclo[3.3.1.1^{3,7}]decan]-6(5H)-yl]methyl ethyl ester (9CI) (CA INDEX NAME)



IC ICM C07D487-10.

ICS C07D491-107; C07D493-10; C07D495-10; C07D209-66; G03C001-73

ICI C07D487-10, C07D209-00; C07D491-107, C07D307-00, C07D209-00;
C07D495-10, C07D333-00, C07D209-00; C07D495-10, C07D333-00,
C07D307-00

CC 27-8 (Heterocyclic Compounds (One Hetero Atom))

Section cross-reference(s): 74

IT Lenses

Polymers, uses

(additives; preparation of spirofulgide and -fulgimide analogs as
photochromic compds.)

IT 162689-29-4P 162689-30-7P 162689-31-8P 162689-32-9P
162689-33-0P 162689-34-1P 162689-35-2P 162689-36-3P

162689-37-4P 162689-38-5P 162689-39-6P 162689-40-9P
 162689-41-0P 162689-42-1P 162689-43-2P 162689-44-3P
 162689-45-4P 162689-46-5P 162689-47-6P 162689-48-7P
 162689-49-8P 162689-50-1P 162689-51-2P 162689-52-3P
 162689-53-4P 162689-54-5P 162689-55-6P 162689-56-7P
 162689-57-8P 162689-58-9P 162689-59-0P 162689-60-3P
 162689-61-4P 162689-62-5P 162689-63-6P 162689-64-7P
 162689-65-8P 162689-66-9P 162689-67-0P 162689-68-1P
 162689-69-2P 162689-70-5P 162689-71-6P 162689-72-7P
 162689-73-8P 162689-74-9P 162689-75-0P 162689-76-1P
 162689-77-2P 162689-78-3P 162689-79-4P 162689-80-7P
 162689-81-8P 162689-82-9P 162689-83-0P 162689-84-1P
 162689-85-2P 162689-86-3P 162689-87-4P

(preparation of spirofulgide and -fulgimide analogs as photochromic compds.)

L23 ANSWER 7 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1994:711863 HCAPLUS

DOCUMENT NUMBER: 121:311863

TITLE: Electrophotographic photoreceptor sheet used in lithographic platemaking

INVENTOR(S): Kato, Eiichi; Tashiro, Hiroshi; Ishii, Kazuo

PATENT ASSIGNEE(S): Fuji Photo Film Co Ltd, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 65 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	
JP 06027750	A2	19940204	JP 1992-201812	1992 0707

PRIORITY APPLN. INFO.: JP 1992-201812

1992
0707

AB In the title electrophotog. photoreceptor sheet comprising a conductive support, a photoconductive layer incorporating a photoconductor compound and a binder resin, and a claimed surface layer, the latter contains a binder resin(s) (A) and the photosensitive layer contains a binder resin(s) (B). Binder resin (A) contains a **polymer** component(s) which yields ≥ 1 CO₂H on reaction, a component(s) which yields ≥ 1 selected from SO₃H, SO₂H, and PO₃H, and ≥ 1 components which yield thermo- or photohardenable groups on reaction. Binder resin (B) (weight average mol. weight $1 \times 10^3 - 2 \times 10^4$) possesses the structural repeating unit CHa1Ca2(CO₂Q3) [a1, a2 = H, halo, CN, hydrocarbyl; Q3 = hydrocarbyl] $\geq 30\%$, and polar groups selected from PO₃H, SO₃H, P(O)(OH)Q1 [Q1 = hydrocarbyl, OQ2 (Q2 = hydrocarbyl)], and cyclic acid anhydride are present in the **polymer** chain or at 1 end of the **polymer** chain. The photoreceptor sheet resists background soiling, has superior desensitization characteristics, and gives highly durable lithog. plates.

IT 159320-18-0P

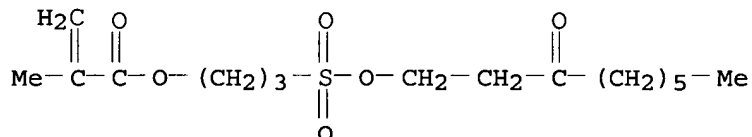
(electrophotog. photoreceptor sheet surface layer containing)

RN 159320-18-0 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, (2,5-dihydro-3,4-dimethyl-2,5-dioxo-1H-pyrrol-1-yl)methyl ester, polymer with 2-methyl-3-oxopentyl 2-methyl-2-propenoate and 3-[[[(3-oxononyl)oxy]sulfonyl]propyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 159320-17-9

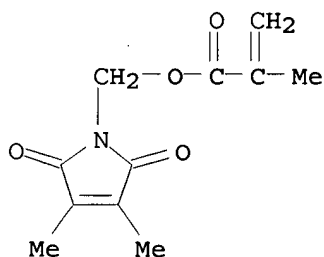
CMF C16 H28 O6 S



CM 2

CRN 159320-16-8

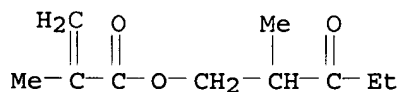
CMF C11 H13 N O4



CM 3

CRN 159320-15-7

CMF C10 H16 O3



IC ICM G03G013-28

ICS G03G005-05; G03G005-06; G03G005-08

CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT 155838-99-6P 159319-77-4P 159319-79-6P 159319-82-1P
 159319-84-3P 159319-87-6P 159319-90-1P 159319-92-3P
 159319-94-5P 159319-96-7P 159319-98-9P 159319-99-0P
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 159320-06-6P 159320-07-7P 159320-08-8P 159320-09-9P
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 159320-14-6P 159320-18-0P 159320-20-4P 159320-21-5P

159320-22-6P

(electrophotog. photoreceptor sheet surface layer containing)

L23 ANSWER 8 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1994:32999 HCAPLUS

DOCUMENT NUMBER: 120:32999

TITLE: Acrylic resins and antifouling coating compositions

INVENTOR(S): Tai, Seiji; Takusari, Hisanori; Tanaka, Hiroyuki; Moribe, Isamu; Ohdoi, Chie

PATENT ASSIGNEE(S): Hitachi Chemical Co., Ltd., Japan

SOURCE: Eur. Pat. Appl., 66 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. -----	KIND ----	DATE -----	APPLICATION NO. -----	DATE
EP 550998	A1	19930714	EP 1992-311647	1992 1221
EP 550998 R: DE, DK, GB	B1	19971119		
JP 06073130	A2	19940315	JP 1992-294293	1992 1102
JP 3196361	B2	20010806		
US 5356979	A	19941018	US 1992-996134	1992 1223
US 5550202	A	19960827	US 1994-225620	1994 0411
PRIORITY APPLN. INFO.:			JP 1991-343331	A 1991 1225
			JP 1992-39355	A 1992 0226
			JP 1992-43085	A 1992 0228
			JP 1992-45009	A 1992 0303
			JP 1992-45010	A 1992 0303
			JP 1992-45011	A 1992 0303

JP 1992-117362	A	1992 0511
JP 1992-167456	A	1992 0625
JP 1992-175253	A	1992 0702
JP 1992-294293	A	1992 1102
US 1992-996134	A1	1992 1223

AB The title resins are prepared from monomers $H_2C:CR(Ar)_k[CO(CH_2)_m]nCO_2X$ ($R = H$, C1-4 alkyl; $Ar =$ benzene or naphthalene residue; $k, m, n = 0-1$; $X =$ cyano, sulfonate, ester, amide, or pyridyl group-containing radical). The resins hydrolyze slowly in seawater to expose a new surface, giving a long-lasting antifouling effect. A resin was prepared by copolymerizing 2-cyanoethyl acrylate 26, tert-Bu methacrylate 11.8, and Me methacrylate 12.4 g.

IT 152108-15-1P 152108-16-2P
(preparation and use as antifouling coatings)

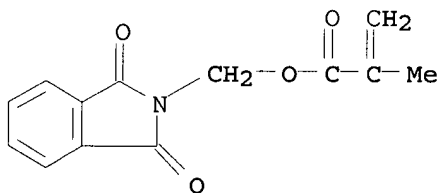
RN 152108-15-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, (1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)methyl ester, polymer with butyl 2-propenoate and ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 147073-64-1

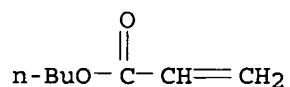
CMF C13 H11 N O4



CM 2

CRN 141-32-2

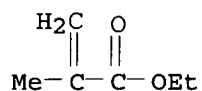
CMF C7 H12 O2



CM 3

CRN 97-63-2

CMF C6 H10 O2



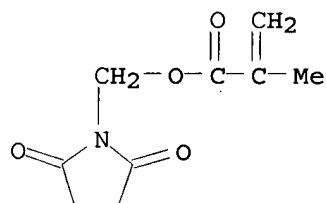
RN 152108-16-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, (2,5-dioxo-1-pyrrolidinyl)methyl ester, polymer with butyl 2-propenoate and ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 147073-68-5

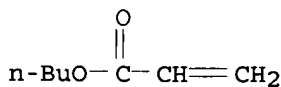
CMF C9 H11 N O4



CM 2

CRN 141-32-2

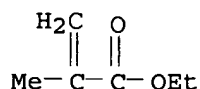
CMF C7 H12 O2



CM 3

CRN 97-63-2

CMF C6 H10 O2

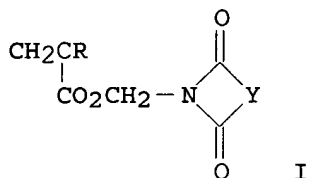


IC ICM C09D005-14
ICS C09D157-06; C08F020-10; C08F012-14
CC 42-10 (Coatings, Inks, and Related Products)
Section cross-reference(s): 5
IT Hydrolysis
(acrylic **polymers** susceptible to, as antifouling coatings)
IT Coating materials
(antifouling, acrylic **polymers** for, hydrolyzable group-containing, manufacture of)
IT Fouling control agents
(coatings, acrylic **polymers** for, hydrolyzable group-containing, manufacture of)
IT 4513-53-5P, 2-Cyanoethyl methacrylate 14794-10-6P 25289-10-5P,
2-Ethylsulfonylethyl methacrylate 38862-25-8P,
N-Methacryloyloxysuccinimide 130952-56-6P 147073-64-1P
147073-68-5P 152104-80-8P 152104-81-9P 152104-82-0P
(preparation and **polymerization** of, for antifouling coatings)
IT 152107-97-6P 152107-98-7P 152107-99-8P 152108-00-4P
152108-01-5P 152108-02-6P 152108-03-7P 152108-04-8P
152108-05-9P 152108-06-0P 152108-07-1P 152108-08-2P
152108-09-3P 152108-11-7P 152108-12-8P 152108-13-9P
152108-14-0P **152108-15-1P 152108-16-2P**
152108-17-3P 152108-18-4P 152108-19-5P 152130-44-4P
(preparation and use as antifouling coatings)

L23 ANSWER 9 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1993:214986 HCAPLUS
DOCUMENT NUMBER: 118:214986
TITLE: Hydrolyzable resin compositions for
antifouling marine coating materials
INVENTOR(S): Tabuchi, Hitoshi; Hamachi, Takeshi; Kojima,
Shigemi; Ueda, Keiji; Mori, Kiyomi
PATENT ASSIGNEE(S): Nitto Kasei Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04261415	A2	19920917	JP 1991-42970	1991 0214
PRIORITY APPLN. INFO.:				JP 1991-42970
				1991 0214

GI



AB The title compns. comprise **polymers** have repeating units I (R = H, Me; Y = alkylene or alkenylene group capable of forming 5 to 8-membered ring, or phenylene). Thus, applying a composition containing phthalimidylmethyl acrylate-Bu acrylate-Me methacrylate copolymer 40, tetrachloroisophthalonitrile 5, Cu₂O 40, red iron oxide 5, talc 5, and xylene 20 parts (.apprx.100 μm thickness) on a PVC sheet gave coatings with solubility 4.0-4.5 μm/mo in sea water.

IT 147073-63-0P 147073-65-2P 147073-69-6P
(preparation of, for antifouling marine coatings)

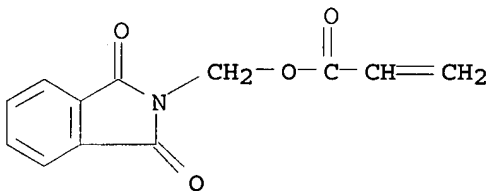
RN 147073-63-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate and (1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)methyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 40459-70-9

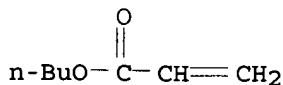
CMF C12 H9 N O4



CM 2

CRN 141-32-2

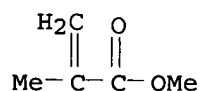
CMF C7 H12 O2



CM 3

CRN 80-62-6

CMF C5 H8 O2



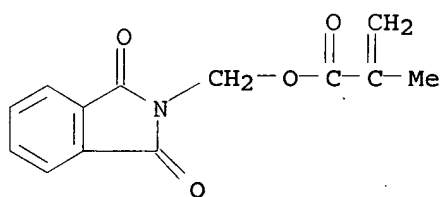
RN 147073-65-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, (1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)methyl ester, polymer with butyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 147073-64-1

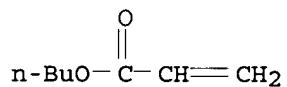
CMF C13 H11 N O4



CM 2

CRN 141-32-2

CMF C7 H12 O2



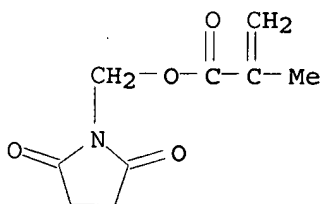
RN 147073-69-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, (2,5-dioxo-1-pyrrolidinyl)methyl ester polymer with butyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

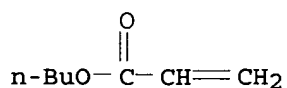
CRN 147073-68-5

CMF C9 H11 N O4



CM 2

CRN 141-32-2
CMF C7 H12 O2



IC ICM C08F220-36
ICS C09D005-14
CC 42-7 (Coatings, Inks, and Related Products)
ST hydrolyzable acrylic marine antifouling coating; fouling control agent acrylic coating; imide group contg acrylate **polymer**
IT 40459-70-9P, Phthalimidylmethyl acrylate
(preparation and **polymerization** of)
IT 25035-82-9DP, Butyl acrylate-methacrylic acid copolymer, reaction products with bromomethyl maleimide 25322-25-2DP, Acrylic acid-methyl methacrylate copolymer, reaction products with bromomethyl maleimide 81979-89-7DP, N-Bromomethyl maleimide, reaction products with (meth)acrylic acid copolymers
147073-63-0P 147073-65-2P 147073-67-4P 147073-69-6P
(preparation of, for antifouling marine coatings)

L23 ANSWER 10 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1993:136056 HCAPLUS
DOCUMENT NUMBER: 118:136056
TITLE: Photographic element
INVENTOR(S): Shiratsuchi, Kentaro; Takaki, Hideki
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Eur. Pat. Appl., 41 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 464609	A2	19920108	EP 1991-110492	1991 0625
EP 464609	A3	19920205		
EP 464609	B1	19970312		
R: BE, DE, FR, GB, IT, NL				
JP 04056955	A2	19920224	JP 1990-167961	1990 0626
JP 2699011	B2	19980119		
US 5212051	A	19930518	US 1991-719433	1991 0624
PRIORITY APPLN. INFO.:			JP 1990-167961	A 1990 0626

GI For diagram(s), see printed CA Issue.
AB A photog. element is described comprising a support having thereon

≥ 1 layer comprising a **polymer** obtained by copolymerizing a repeating unit represented by the general formula -Ax-By-I 5-95 weight% and a copolymerizable cellulose derivative (I) [A = repeating unit derived from an ethylenically unsatd. monomer having COOH, SO₃H, or PO(OH)₂; B = repeating unit derived from a copolymerizable ethylenically unsatd. monomer; R₁ = H, a monovalent organic bonding group such as an ester group or an Et group, a monovalent organic bonding group R₂CHG(:CH₂)L-, with the proviso that R₁s are not all H at the same time; n = 20-800; R₂ = H, alkyl; L = bivalent organic bonding group; x = 1-95; and y = 5-99]. The weight percentage of R₂CH(:CH₂)L compared to I is 0.00001-10. The **polymer** provides an effective temporary diffusion barrier layer.

IT 146448-12-6P

(preparation and use of, diffusion barrier layer for photog. element from)

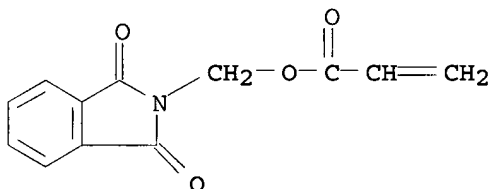
RN 146448-12-6 HCAPLUS

CN Cellulose, acetate [2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]carbamate, polymer with (1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)methyl 2-propenoate, methyl 2-methyl-2-propenoate and 2-methyl-2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 40459-70-9

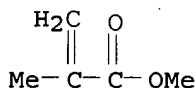
CMF C12 H9 N O4



CM 2

CRN 80-62-6

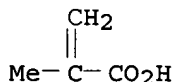
CMF C5 H8 O2



CM 3

CRN 79-41-4

CMF C4 H6 O2



CM 4

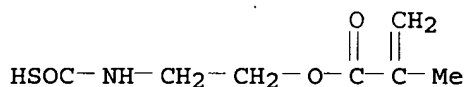
CRN 144376-96-5

CMF C7 H11 N O3 S . x C2 H4 O2 . x Unspecified

CM 5

CRN 167208-31-3

CMF C7 H11 N O3 S



CM 6

CRN 9004-34-6

CMF Unspecified

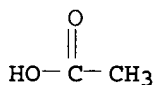
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 7

CRN 64-19-7

CMF C2 H4 O2



IC ICM G03C008-54

ICA C08B011-187; G03C001-04

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST paper photog diffusion barrier layer; cellulose **polymer**
diffusion barrier layer; film photog diffusion barrier layerIT Photographic paper
(diffusion barrier layer for, temporary, cellulose **polymer** for)IT Photographic films
(diffusion barrier layer, temporary, cellulose **polymer** for)IT 144376-96-5P
(preparation and **polymerization** of, diffusion barrier layer for photog. element from)IT **146448-12-6P** 146448-13-7P
(preparation and use of, diffusion barrier layer for photog. element from)

L23 ANSWER 11 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN

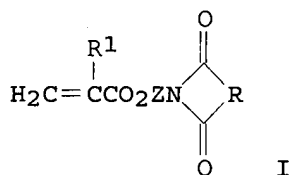
ACCESSION NUMBER: 1989:523745 HCAPLUS

DOCUMENT NUMBER: 111:123745

TITLE: Electrostatic image development toners for hot
 roll press fixation
 INVENTOR(S): Higashida, Osamu; Kumagai, Yugo
 PATENT ASSIGNEE(S): Hitachi Chemical Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 63287964	A2	19881125	JP 1987-124951	1987 0521
PRIORITY APPLN. INFO.:			JP 1987-124951	1987 0521

GI



AB The title toners contain **polymers** of the imide
 group-containing vinyl compds. I (R = various cyclic compound residue;
 R1 = H, Me; Z = C1-6 alkylene, divalent alicyclic or aromatic ring
 residue), wherein gel permeation chromatog. of the
polymers gives 5-95% fraction (mol. weight >50,000) with a
 glass transition temperature 20-90°.

IT 122582-99-4P

(manufacture of, for electrostatog. toners for hot roll fixation)

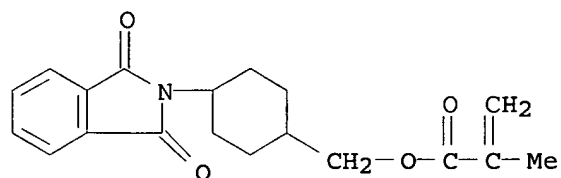
RN 122582-99-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, [4-(1,3-dihydro-1,3-dioxo-2H-isoindol-
 2-yl)cyclohexyl]methyl ester, polymer with butyl 2-propenoate,
 ethenylbenzene and (1,3,3a,4,7,7a-hexahydro-4-methyl-1,3-dioxo-2H-
 isoindol-2-yl)methyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 113562-28-0

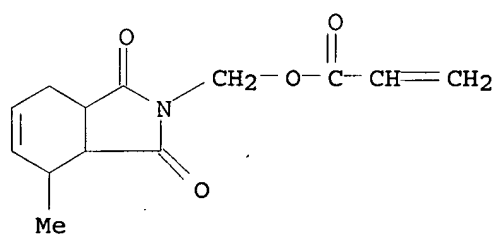
CMF C19 H21 N O4



CM 2

CRN 106646-52-0

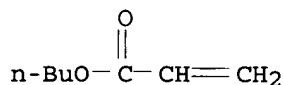
CMF C13 H15 N O4



CM 3

CRN 141-32-2

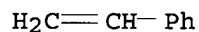
CMF C7 H12 O2



CM 4

CRN 100-42-5

CMF C8 H8



IC ICM G03G009-08

ICS C08F020-36

CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST acrylic imide polymer electrophotog toner

IT Electrography

(developers, toners, imide group-containing acrylic polymers in, for hot roll fixation)

IT Electrophotographic developers

(toners, imide group-containing acrylic polymers in, for hot roll fixation)

IT 122564-08-3P 122564-09-4P 122582-98-3P 122582-99-4P

122583-14-6P 122583-15-7P 122583-16-8P 122583-17-9P
(manufacture of, for electrostatog. toners for hot roll fixation)

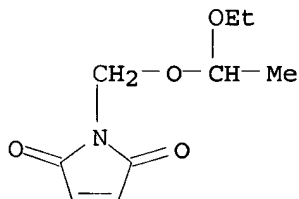
L23 ANSWER 12 OF 12 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1989:202895 HCAPLUS
DOCUMENT NUMBER: 110:202895
TITLE: Photoresist materials containing
polymer with blocked imide groups and
suitable maleic acid imide monomer therefor
INVENTOR(S): Osuch, Christopher E.; McFarland, Michael
James
PATENT ASSIGNEE(S): Hoechst A.-G., Fed. Rep. Ger.; Hoechst
Celanese Corp.
SOURCE: Eur. Pat. Appl., 20 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 291994	A2	19881123	EP 1988-108095	1988 0520
EP 291994	A3	19910227		
R: AT, BE, CH, DE, FR, GB, IT, LI, NL, SE				
US 4810613	A	19890307	US 1987-52950	1987 0522
JP 01033546	A2	19890203	JP 1988-122209	1988 0520
US 4962171	A	19901009	US 1988-289592	1988 1222
US 5081001	A	19920114	US 1990-543321	1990 0625
US 5200529	A	19930406	US 1991-782699	1991 1025
PRIORITY APPLN. INFO.:			US 1987-52950	A 1987 0522
			US 1988-289592	A3 1988 1222
			US 1990-543321	A3 1990 0625

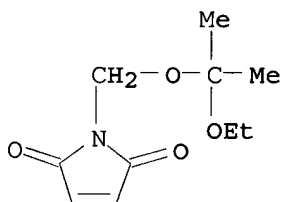
AB Photoresist materials, especially suitable for use with deep UV radiation and possessing a high resolving power, are composed of a polymer having imide groups blocked by acetal or ketal units containing a bound methylol or methylol group, an acid-forming compound, and a suitable solvent. A Si wafer was overcoated with a

photoresist solution containing an N-(2,4-dioxa-3,3-dimethylpentyl)-2H,5H-2,5-dioxopyrrole-styrene copolymer, diphenyliodonium trifluoromethanesulfonate, and 2-methoxyethyl ether, dried, imagewise contact exposed using deep UV radiation, and developed to produce a microrelief structure on the Si wafer.

IT 120461-73-6P 120461-75-8P
(preparation and polymerization of)
RN 120461-73-6 HCAPLUS
CN 1H-Pyrrole-2,5-dione, 1-[(1-ethoxyethoxy)methyl]- (9CI) (CA INDEX NAME)



RN 120461-75-8 HCAPLUS
CN 1H-Pyrrole-2,5-dione, 1-[(1-ethoxy-1-methylethoxy)methyl]- (9CI)
(CA INDEX NAME)



IC ICM G03F007-10
ICS G03F007-08
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
ST blocked maleimide **polymer** photoresist; deep UV photoresist compn
IT Resists
(photo-, containing **polymer** with blocked imide groups)
IT 75-47-8, Triiodomethane 64146-77-6, Diphenyliodonium tetraphenylborate 66003-76-7
(photoresists comps. containing **polymer** with blocked imide group and)
IT 120461-72-5P 120461-73-6P 120461-74-7P
120461-75-8P 120461-76-9P
(preparation and polymerization of)